

ANNUAL REPORT
OF THE
DEPARTMENT OF AGRICULTURE
OF THE
PROVINCE OF ALBERTA
FOR THE YEAR
1932

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON:
PRINTED BY W. D. McLEAN, KING'S PRINTER
1933

DEPARTMENT OF AGRICULTURE, EDMONTON.

TO HIS HONOUR,

WILLIAM LEGH WALSH,

Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to submit herewith the Report of the Department of Agriculture for the year 1932.

I have the honour to be, Sir,

Your obedient servant,

GEORGE HOADLEY,

Minister of Agriculture.

DEPARTMENT OF AGRICULTURE

1932

Hon. George Hoadley, Minister of Agriculture

Heads of Branches

- H. A. Craig, Deputy Minister and Superintendent of Schools of Agriculture.
- J. F. Andrew, Assistant Deputy Minister of Agriculture and Director of Demonstration Farms.
- P. W. Johnson, Secretary to the Department.
- C. P. Marker, Dairy Commissioner.
- S. G. Carlyle, Live Stock Commissioner, Brand Recorder and Superintendent of Fairs and Institutes.
- P. R. Talbot, V.S., Provincial Veterinarian.
- E. L. Gray, Field Crops Commissioner.
- G. M. Cormie, Poultry Commissioner.
- S. H. Clark, Game and Fire Commissioner.
- Miss Marion E. Storey, Acting Director of Alberta Women's Bureau.
- G. S. Black, Supervisor of School Fairs and Junior Farm Club Work.

Report of the Deputy Minister

HONOURABLE GEORGE HOADLEY,
Minister of Agriculture.

SIR,—

I have the honour to submit herewith the report of the Department of Agriculture for the year 1932.

The production of field crops in Alberta in 1932 was of uniform distribution, average yield and high quality. In contrast with the previous year no large area suffered a complete crop failure. Over the greater part of the Province the yields of all crops were very satisfactory, and in practically all of the area where this condition did not prevail there was sufficient for seed and feed purposes. The total yield of wheat was 164,000,000 bushels as compared with 136,000,000 bushels in 1931. The quality was well above average, a very large percentage grading No. 1 and No. 2 Northern. There is a marked increase in the area being devoted to pasture and forage crops, largely due to the increased tendency towards diversification of production. The sugar beet crop has during the past year been most satisfactory, both from the standpoint of production and returns, there being a total production of 150,000 tons. Viewed from all angles, field crop production during 1932 has been above average both as to quality and quantity.

There is continued increase of interest in live stock, evidence of which may be found in the active demand for pure-bred breeding stock and in the number of beef cattle and lambs placed in feed lots for finishing. Despite the prevailing low prices for live stock, farmers realize that this enterprise offers the most satisfactory outlet for fodder, coarse grains and even for a part of the wheat crop. This is particularly true with regard to the finishing of cattle. The number of beef calves and yearlings being finished and marketed under supervision and through the Red Label Beef Association has increased over previous years. There is a revival of interest in horse breeding, while at the same time the number of horses exported from the Province has decreased. This indicates that in readjustment of the farm business the horse is taking a more prominent place than heretofore as a source of farm power. Good stallions have been keenly sought after during 1932.

There has been a slight decrease in the number of dairy cows in the Province and in the amount of creamery butter produced. There is, however an increase of 38% in the production of cheese, indicating that this branch of agriculture is being maintained on a level only slightly below the peak year of 1931. Prices, while disastrously low during a part of the past summer, have been re-established at levels which enable dairymen to carry on in a comparatively satisfactory manner. It is gratifying to note in connection with our dairy production that a steadily increasing percentage of the cream arriving at creameries is grading in the higher grades.

Poultry production shows a slight decrease as compared to 1931. It is estimated that there is a decrease of poultry population of from 15 to 20%. There is also a decrease in the quantity of eggs exported. This, however, is partly due to increased home consumption. It is believed that the decrease referred to has taken place on those farms where poultry does not receive careful attention rather than where poultry is an important part of the production programme. This branch of farming continues to provide a regular income at a time when receipts from some other sources have shrunk almost to the vanishing point.

The beekeepers of the Province have during the past year made marked progress in the eradication of bee diseases. There is a considerable increase in the number of small beekeepers, indicating that many farmers are adopting this branch of agriculture as a means of providing a greater portion of the family food supply, and in some instances as a source of income. Unfortunately, the honey flow in 1932 was not so abundant as that of 1931. The industry, however, is making sound progress, and with more favourable conditions will make a very considerable contribution to farm revenue.

It is to be regretted that prices for farm commodities have continued to decrease, and to create a situation with respect to agricultural conditions which is by no means as gratifying as a review of production statistics would indicate. It is, however, with a great deal of pleasure that we observe the success attained by exhibitors from this Province at the largest fairs on the continent, and also that our agricultural products of all kinds are the object of favourable comment in the export market, where they meet with world-wide competition. The maintenance of this high standard of quality and of a steady supply will be the deciding factor in taking fuller advantage of the greater opportunities in the British market which will be open to us when the quotas and preferences created by the Imperial Conference come into full effect.

The office of the Game Commissioner was made vacant by the death of Mr. Benjamin Lawton. This office was filled by the appointment of Mr. Stanley Clark, of Entrance.

The reports of the various Branches are attached herewith, and give a resumé of the work carried on by each.

H. A. CRAIG,
Deputy Minister.

Report of the Dairy Commissioner

(C. P. MARKER)

At the end of the year 1931 it was reported that Alberta's dairy industry had then set up a new high record for volume of production. At the end of 1932 we find that production has declined somewhat, and that the market and prices for most of our dairy products reached new low levels during the year.

Aside from the price question, the outstanding features of the 1932 dairy activities compared with 1931 were:

1. The number of dairy cows recorded during the June survey was somewhat lower than that of the previous year.
2. Somewhat smaller production of creamery butter and a relatively larger output during the winter months.
3. Further improvement in the quality of the cream supply to creameries, and of the resulting butter output.
4. A considerably increased production of cheese and home dairy butter.

Most of these points are covered at some detail in the following pages.

LICENSES AND PERMITS.

There were granted, during the year, 14 licenses in Form "A" for milk and cream testers; 181 licenses in Form "B" for cream graders and testers, and 104 licenses in Form "C" for dairy factories, under the provisions of The Dairymen's Act and Regulations. The fees paid for these licenses amounted to \$910.

Eight permits were also granted covering the transfer of cream under specified conditions, from one creamery to another, for the purpose of manufacture.

CREAMERIES AND CHEESE FACTORIES.

Alberta had 95 creameries in operation during the year, and their preliminary reports to the Department show that they manufactured 21,016,048 pounds of butter, a decrease of 8½ per cent. compared with the previous year's production. The 12 cheese factories reported an output of 1,439,315 pounds of cheese, an increase of 38 per cent. over the 1931 output. The manufacturers of ice cream reported a 10 per cent. decline in their year's production.

The following table gives a summary of the production and values of Alberta's dairy products for the years 1932 and 1931 by way of comparison. Some of the causes of the principal variations in production and the further decline in prices are referred to elsewhere in this report.

DEPARTMENT OF AGRICULTURE

QUANTITIES AND VALUES OF DAIRY PRODUCTS, 1932 AND 1931

1932			
	Pounds.	Price, cents.	Total Value.
Creamery butter (95 Creameries).....	21,016,048	16.71	\$3,512,685
Factory cheese (12 Factories)	1,439,715	10.15	146,177
Other dairy products (*) .....	.....	.....	8,191,138
Total value.....	.....	.....	\$11,850,000
1931			
Creamery butter (93 Creameries)	22,957,922	20.52	\$ 4,711,232
Factory cheese (10 Factories)	1,040,588	11.38	118,390
Other dairy products (*) .....	.....	.....	10,920,378
Total value .....	.....	.....	\$15,750,000

(*) Including milk and cream for direct consumption; ice cream, home-made butter and cheese, skimmed milk and buttermilk.

The table below shows that the 95 creameries reported a decrease of practically 8 per cent. in their cream and butter fat receipts for 1932, but it is again significant to note that the receipts for the first four months of the year were nearly equal to the receipts for the corresponding period of 1931. For the six summer months, however, May to October inclusive, the decrease was 11 per cent. The figures show further that the six winter months—the first four and the last two months of the year—account for 24.7 per cent. of the total cream receipts in 1929; 26.9 per cent. in 1930; 32.2 per cent. in 1931, and 34.9 per cent. in 1932, a relative increase of 10.2 per cent. in three years, and consequently a corresponding decrease in the percentage receipts during the summer months.

These figures indicate a definite trend in the direction of a more evenly balanced yearly production—a course which will help greatly in promoting stable market conditions.

Referring again to the cream receipts at the creameries during the year, the heaviest decrease occurred in the areas north of Millet and south of Bowden, areas usually termed the Northern and Southern Sections. The creameries operating in the Central Section (Bowden to Millet) showed a decrease of only 2.6 per cent.

MONTHLY BUTTERFAT RECEIPTS—ALBERTA CREAMERIES.

	1929.		1930.		1931.		1932.	
	Weeks.	Lbs.	Weeks.	Lbs.	Weeks.	Lbs.	Weeks.	Lbs.
January	(5)	553,314	(5)	571,363	(5)	1,012,049	(5)	1,147,160
February	(4)	463,559	(4)	475,904	(4)	874,529	(4)	872,565
March	(4)	522,306	(4)	568,303	(4)	974,594	(5)	1,214,859
April	(4)	669,101	(4)	690,720	(5)	1,642,057	(4)	1,233,053
May	(5)	1,327,653	(5)	1,532,538	(4)	1,843,584	(4)	1,695,211
June	(4)	2,049,945	(4)	1,078,803	(4)	2,427,971	(5)	3,037,045
July	(5)	2,710,896	(5)	2,845,211	(5)	3,230,093	(4)	2,278,974
August	(4)	1,777,929	(4)	2,002,411	(4)	2,246,849	(5)	2,209,263
September	(4)	1,347,292	(4)	1,539,060	(4)	1,754,133	(4)	1,287,573
October	(5)	1,188,476	(5)	1,336,270	(5)	1,433,281	(4)	1,024,563
November	(4)	579,192	(4)	811,371	(4)	870,287	(4)	831,199
December	(4)	454,411	(4)	735,312	(4)	840,945	(5)	1,011,257
Total	(52)	13,644,074	(52)	15,187,266	(52)	19,150,372	(53)	17,844,088

Another table gives a comparative view of the cream receipts reported by the creameries for each of the past three years, also of the quantity and percentages of butter fat contained in each grade of cream. The grade known as "I.C.Sp.", was discontinued at the end of 1931.

AVERAGE TESTS AND GRADES OF CREAM.

	1932.		1931.		1930.	
	Lbs.	%	Lbs.	%	Lbs.	%
Cream received	52,700,124	.....	56,690,198	.....	45,469,582	.....
Average test		(33.9)		(33.8)		(33.4)
Butterfat:						
Table Grade	503,933	2.8	495,750	2.6	483,550	3.2
I.C. Sp. Grade			1,032,752	5.4	300,700	2.0
Special Grade	10,643,160	59.7	8,784,246	45.8	6,371,144	41.9
First Grade	5,821,276	32.6	7,502,448	39.2	6,977,793	45.9
Second Grade	854,159	4.8	1,280,569	6.7	999,111	6.6
Off Grade	21,560	.1	54,607	.3	54,968	.4
Total.....	17,844,088	100.0	19,150,372	100.0	15,187,266	100.0

It is satisfactory to note a further substantial improvement in the percentage of "Special" grade cream and that this improvement is reflected in the reports of the grading of creamery butter by the federal dairy produce graders.

Mr. Joseph Burgess, chief of the division of dairy produce, Dominion Department of Agriculture, stated recently in the course of an address before the annual convention of the Eastern Ontario Dairymen's Association, that more than 82 per cent. of Alberta's creamery butter output had been so graded during the year. He also made the general observation that: "It is rather an interesting point that in the provinces where cream grading first started and where it has been followed up successfully, there is not only a marked increase in the percentage of first grade butter, but the records also show that there is a much larger proportion of high scoring first grade butter than there is in either . . . (naming two Eastern provinces)."

The grading of cream, or, rather, the principle of providing the individual cream producer with a market and price based upon the quality of his product, was started in Alberta in the spring of 1910, and has since become a recognized, integral feature of our dairy industry.

MONTHLY GRADING OF CREAM

The following table is inserted here for the purpose of showing in percentages, month by month, the classification of the cream received by the creameries during the year 1932.

Months.	Weeks.	Table Grade	Special Grade	First Grade	Second Grade	Off Grade	Total
		%	%	%	%	%	
January	5	4.2	68.9	21.7	4.8	.4	100.0
February	4	3.7	73.8	18.2	4.1	.2	100.0
March	5	3.8	72.6	19.7	3.7	.2	100.0
April	4	3.0	63.9	27.8	5.1	.2	100.0
May	4	2.5	59.0	33.2	5.2	.1	100.0
June	5	2.0	52.8	39.1	6.0	.1	100.0
July	4	2.0	50.1	42.5	5.4	....	100.0
August	5	2.1	48.2	44.7	5.0	....	100.0
September	4	2.5	53.1	40.0	4.3	.1	100.0
October	4	3.1	64.9	28.1	3.7	.2	100.0
November	4	4.3	74.6	17.7	3.2	.2	100.0
December	5	4.4	75.2	17.1	3.1	.2	100.0
Average for year.....		2.8	59.7	32.6	4.8	.1	100.0

COW TESTING AND MILK RECORDING ASSOCIATIONS.

This very important work was continued during the year by the Dominion Department of Agriculture, Live Stock Branch. There can be no doubt that the depressed price structure in the dairy product markets will cause more interest among dairymen generally in the valuable information that may be obtained through a system-

atic record of production of the individual animals in the dairy herd. Though the figures for the number of associations, etc., for 1932 are not yet available, it is interesting to note certain data published by the Dominion Live Stock Branch respecting the cow-testing association work in Alberta in the year 1931:

"There were 27 cow-testing groups or associations, made up of 410 herds and 4,393 cows. Of the total cows recorded, 2,416 cows averaged 6,910 pounds milk and 261.73 pounds fat. The average test is 3.78 per cent. Ninety-six herds and 940 cows averaged 300 pounds butterfat and over for the year."

Following is the Summary of Results, 1926-1931 inclusive, for the Province of Alberta:

Year.	Cows recorded		Average production of cows			Cows Herds	
	Total	8 mos. and over	Milk	Test	Fat	averaging 300 lbs. fat & over	No.
	No.	No.	Lbs.	%	Lbs.	No.	No.
1926	312	122	5,055	3.88	196.22	8	....
1927	784	209	6,419	3.77	242.51	47	....
1928	828	405	6,220	3.74	233.22	69	....
1929	1,012	584	7,080	3.70	263.64	189	....
1930	2,526	1,255	6,936	3.76	260.91	343	33
1931	4,393	2,416	6,910	3.78	261.73	940	96

ANALYTICAL SERVICE.

In the continuation of the analytical service from former years, samples of 2,529 churnings of creamery butter were tested for moulds and yeasts, and the findings reported to the operators of the creameries concerned. A considerable number of samples were also analysed for moisture and salt contents, as well as for moulds and yeasts, in connection with the Calgary and Edmonton exhibitions, and creamery butter contests sponsored by the Alberta Dairymen's Association.

The reports of these analyses, promptly supplied to the creameries, furnish a valuable guidance to the plant workers as to the sanitary condition of equipment, supplies, and working methods obtaining at the plants.

Mr. J. B. Linneboe returned from his year's leave of absence, and on October 1st resumed his duties as bacteriologist in the Department, Mr. F. W. Wood having handled the work successfully during Mr. Linneboe's absence.

INSTRUCTIONAL WORK.

As in former years the members of the Dairy Branch staff have been called upon to assist in the teaching and short course work in the Department of Dairying at the University of Alberta. Instruction has also been given upon various occasions in the manufacture of cheese under home dairy conditions.

GENERAL STATISTICAL DATA.

The following tables show, at a glance, some of the outstanding features of Alberta's dairy development during stated periods of years. Earlier data of a corresponding character have been published in previous annual reports of the Department.

ANNUAL REPORT, 1932

13

DAIRY STATISTICS, ALBERTA

MILCH COWS

Year.	Cows.	Year.	Cows.
1901	46,101	1925	460,722
1906	101,235	1926	436,500
1911	147,687	1927	380,000
1916	277,324	1928	344,495
1921	432,838	1929	345,566
1922	392,037	1930	348,297
1923	410,242	1931	438,954
1924	433,528	1932	424,000

TOTAL ANNUAL VALUE OF DAIRY PRODUCTS

1900	\$ 546,476	1923	\$22,975,000
1910	7,855,761	1924	23,208,562
1915	15,895,586	1925	23,002,000
1916	18,466,311	1926	21,820,000
1917	24,794,597	1927	20,750,000
1918	27,500,000	1928	20,350,000
1919	31,625,000	1929	20,750,000
1920	34,000,000	1930	18,675,500
1921	25,500,000	1931	15,750,000
1922	22,950,000	1932	11,650,000

CREAMERY BUTTER PRODUCTION

	Creameries.	Lbs. of Butter.	Selling Value. (cents per lb.)	
1920	53	11,821,291	\$6,555,509	(55.45)
1921	41	13,048,493	4,543,097	(34.82)
1922	54	15,417,070	5,126,843	(33.25)
1923	75	17,868,853	5,891,186	(32.97)
1924	89	22,339,857	7,059,630	(31.60)
1925	99	19,630,101	6,959,059	(35.45)
1926	99	19,912,466	6,568,280	(32.96)
1927	100	16,179,712	5,765,347	(35.63)
1928	100	14,375,636	5,374,456	(37.38)
1929	95	16,004,463	5,825,247	(36.39)
1930	92	17,716,744	4,968,227	(28.04)
1931	93	22,957,922	4,711,231	(20.52)
1932	95	21,016,048	3,512,685	(16.71)

FACTORY CHEESE PRODUCTION

Year.	Factories.	Lbs. of Cheese.	Selling Value. (cents per lb.)	
1920	7	398,750	\$ 110,355	(27.70)
1921	10	930,660	200,478	(21.54)
1922	14	981,992	183,860	(19.73)
1923	13	1,865,608	368,771	(19.77)
1924	12	1,714,790	278,478	(16.24)
1925	14	1,473,835	306,604	(20.80)
1926	15	1,449,983	275,107	(19.00)
1927	12	848,511	170,690	(20.12)
1928	9	722,048	158,404	(21.94)
1929	10	1,001,475	198,047	(19.78)
1930	8	1,035,352	175,392	(16.94)
1931	10	1,040,588	118,390	(11.38)
1932	12	1,439,715	146,177	(10.15)

Report of the Live Stock Commissioner

(S. G. CARLYLE)

The price of live stock in common with the price of other farm commodities steadily dropped during 1932, until at the end of the year they had reached new low levels.

The price received for good and choice steers during the month of January was an average of \$4.50, advancing to a monthly average of \$4.90 in April, and gradually dropping until November and December, when the average price was \$2.90. These are the lowest prices received for choice steers since the Calgary and Edmonton Stock Yards opened.

In common with the low price of commercial stock, pure-bred registered animals have been selling at exceedingly low prices during the past year. A large number of farmers have taken advantage of these low prices in securing pure-bred sires, and in many cases pure-bred females as well.

There has been a splendid demand for horses throughout the year. Good consignment sales were held at High River, Red Deer and Lacombe, eastern buyers being present and taking a good percentage of the better class. The greatest demand seems to be for farm chunks, weighing from 1,400 to 1,500 lbs., though there is also a demand for the real good big draft horses, but only a few of them are to be found.

Approximatel 11,000 fewer horses were shipped out of the Province this year than in 1931, but this is accounted for by the heavy demand for work horses in the northern part of the Province. While the prices are low, being due to the low price of other farm commodities and scarcity of money, still the horse business is perhaps just as profitable to the producer as other classes of stock.

Everything points to an increase in the next few years in the number of colts raised, as there has been a stronger demand for good draft stallions than for many years back. There were 14,546 horses shipped out of the Province in 1932, in comparison with 24,055 the year before.

Several stallion clubs were formed, and the Dominion Government also put into effect a bonusing system which was taken advantage of by quite a large number of stallion owners in this Province.

The breeding of light horses is still continuing, and the Federal policy of bonusing for them is taken advantage of in the Millarville, Calgary and Edmonton districts. The present seems an opportune time for the raising of a few extra colts on the farm, for if the price of grain continues to be low tractors will not be used, and horse-power will take their place.

Keener interest is being taken in the feeding and finishing of cattle than in perhaps any other line of live stock at present, and it is felt that this is a move in the right direction, as with the cheap

grains in this Province, practically all the cattle should be finished before being sent to market.

In 1929 a few of the ranchers in the southern part of the Province formed an association for the purpose of putting their calves and steers out to farmers to feed on a contract basis. Since the high tariff was put on Canadian cattle in the United States in 1930, which practically prohibited all Canadian exports to that country, it was felt by these men that the only market left was the British market, and this market demanded a better finished animal than that which had been going to the United States, therefore to meet this condition the association was formed. The results up to the present time have been highly satisfactory, both to the rancher and farmer, and this year again some 2,700 head of cattle were put out to the farmers in various parts of the Province, but centering chiefly in the Lethbridge, High River and Lacombe districts. If this contract system between the ranchers and farmers continues to be as satisfactory in the next few years as in the past, there is little doubt but what most of the cattle now raised on ranches will be finished in farmers' feed lots. Some 14,000 head of good cattle are being finished this year, and it is felt that in order to keep the price level on a profitable basis that about half this number should be exported from the country.

There has been a demand for good bulls, and we feel that the farmers should be encouraged to raise the standard of their cattle. At the present time we are on an export basis, and any increase in stock will have to be exported, and in order to obtain profitable prices these cattle must be of a very high quality. If we are to compete with other countries every encouragement should be given to our farmers to breed better cattle and put them on the market in a finished condition.

Although the creamery butter production was not as high in 1932 as in the year previous, the farmers still rely on their cream cheques for paying household expenses. The price of dairy cattle has dropped to the lowest level for a number of years, but there is still a fairly good demand for good cows. Jersey breeders have been very active in pushing their breed, and the distributing dairies in Calgary and Edmonton have advertised Jersey milk, which has met with a ready sale. This has made quite a demand for Jersey cattle, and several carloads have been brought in from British Columbia to meet this demand.

Two of the largest Holstein herds in Canada are in Alberta—the C.P.R. herd at Strathmore and Hays & Co. at Calgary. These cattle have been very successful on the fair circuits, and especially at the Royal Winter Show, where they won a great many prizes and championships.

Under the Provincial Pure-bred Bulls Purchase Act assistance was given to forty-seven farmers. The breeds of bulls were as follows: Shorthorns 41, Angus 3, Herefords 1, Ayrshires 1, Holsteins 1; total, 47.

The bull sales at Calgary, Edmonton, Lacombe and Lloydminster were fairly successful, and they sold at reasonable prices, considering the times. The Federal Government made purchases

again this year, and secured a large number of good bulls. Below is a summary of the bull sales:

1932 EDMONTON BULL SALE

Breed.	No. Sold	Average Price
Hereford	4	\$ 90.00
Shorthorn	98	97.45
Aberdeen-Angus	11	85.00
Red Polled	2	122.50
Ayrshire	1	65.00
	116	\$ 96.16

1932 CALGARY BULL SALE

Breed	No. Sold	Average Price
Aberdeen Angus	86	\$ 93.86
Red Polled	1	50.00
Herefords	327	147.00
Shorthorns	230	113.33
	644	\$127.65

1932 LACOMBE BULL SALE

Breed	No. Sold	Average Price
Herefords	16	\$ 80.62
Shorthorns	38	85.26
Angus	11	77.72
Red Polled	1	50.00
	56	\$ 82.34

The sheep business in the Province is perhaps on as good a foundation as any other class of stock. It is true that the price of wool is very low, and this has affected the ranchers in the southern part of the Province, but the farmers in the central and northern part have depended on the sale of their lambs for mutton purposes rather than for wool, so that the price of wool is not affected to the same extent. The price of good market lambs, while lower than for a number of years, is still as high, if not higher, than other classes of stock, and with these low prices there is an increase in the consumption of mutton and lamb. Our consumption at present is very low, some eight pounds per capita, against eighty pounds of pork products.

A larger number of lambs is on feed in this Province than perhaps ever before. Some 60,000 head were put in the feed lots in the fall of 1932. The packers still continue to feed a large number, but there is no reason why the farmers who have the feed should not be doing this business. The farmers in the Brooks district have been feeding lambs on a contract basis with the rancher for the past three years, and their results have been highly satisfactory.

There has been a good demand for rams the past year, and the farmers have purchased a large number. They are taking advantage of the low prices of breeding stock to bring in new blood to improve their flocks. The quality of our sheep, in comparison with hogs and cattle, has, I think, reached a higher standard.

Below is a summary of the sheep sales held at Edmonton, Calgary and Lacombe:

1932 EDMONTON SHEEP SALE

Breed	No. Sold	Average Price
Hampshire Ewes	10	\$ 6.40
Oxford Ewes	12	6.17
Shropshire Ewes	15	4.17
Suffolk Ewes	18	10.33
	55	\$ 7.39
Grade Ewes	8	\$ 4.06
Cheviot Rams	2	\$18.50
Hampshire Rams	23	18.24
Oxford Rams	47	14.65
Shropshire Rams	6	12.83
Suffolk Rams	20	19.98
	98	\$16.55

1932 CALGARY SHEEP SALE

Breed	No. Sold	Average Price
Oxford Ewes	34	\$ 3.72
Shropshire Ewes	31	3.72
Suffolk Ewes	80	7.92
Hampshire Ewes	32	11.66
	177	\$ 7.05
Grade Ewes	975	\$ 1.86
Southdown Rams	1	\$20.00
Hampshire Rams	76	16.41
Oxford Rams	39	11.25
Shropshire Rams	18	9.50
Suffolk Rams	86	18.38
	220	\$15.71

1932 LACOMBE SHEEP SALE

101 Ewes sold for	\$306.50	2 Pure-bred Ewes sold for.....	\$ 20.00
Average	3.05	Average	10.00
55 Rams sold for	988.00	47 Lambs sold for	126.00
Average	17.95	Average	2.70

The price of hogs was disappointingly low throughout the whole year, and reached new low levels during the latter part of the year. This had the unfortunate effect of decreasing the number of sows bred, and it is estimated that there were from 15 to 20 per cent. less sows bred in the fall of 1932 than 1931. There was quite a large increase in the number of hogs marketed during the year, there being approximately 170,000 more than in 1931. This, I think, is a satisfactory increase, and if the prices had been higher, there, no doubt, would have been another increase in 1933. The quality, however, continues to improve, but we are still very low in the number of our select hogs in comparison with the eastern provinces. However, most of the farmers seem to be alive to the fact that if we are to get a place on the export market the quality of our hogs must be improved, and with this in view, I think they are paying more attention to the quality of the boars that they are using than ever before. The bruising of hogs still continues to provide a very heavy loss at the packing plants, and publicity should be given as wide as possible to this loss, so that the farmers, drovers and all those handling hogs will do their utmost to handle the hogs as carefully as possible.

There has been a good demand for breeding stock, and the sales held were fairly satisfactory.

Report of the Superintendent of Fairs

(S. G. CARLYLE)

Owing to no grants being given by the Government to fairs in 1932, only a very few were held. At these fairs the quality of stock was exceedingly good, and a great interest was taken locally.

While the prize money was very limited, the people in certain districts were anxious to keep the fairs going, their opinion being that if they were discontinued for one or two years there would be difficulty in starting them again. The number of exhibitors, and also the number of people who attended the fairs, justified the efforts of the managements, and quite a number have already written in stating that they were going to hold a fair again in 1933.

Report of Extension Work

(S. G. CARLYLE)

There was a good demand for short courses and meetings throughout the Province during the winter of 1931-32, and a considerable number was held. These meetings were for the most part well attended, and the farmers were very much interested in the questions discussed.

Greater interest has been taken in forage crops and the seeding down of clovers and grasses and in live stock. Particular interest has been taken in the work of the boys' and girls' swine clubs, calf clubs, alfalfa clubs, and grain clubs.

In addition to the meetings and short courses during the winter, three field days were held at the farms of Mr. Chas. Ball, Sedgewick, Mr. Watson, Provost, and Mr. Alex. Craig, Wembley. These were well attended, especially at the farm of Mr. Ball, where some five hundred people were present. Great interest was taken, and we feel that the number of these field days can be greatly increased to advantage in the coming summer. The getting together of people in the summer time, when they can drive with their cars and have a basket picnic, and in conjunction hear a number of speakers from the Department and the University, has been shown to be a popular move, especially when they are held on some good farm.

Meetings were held by the Extension Branch during the past year at Falher, Donnelly, Tangent, Calgary, Lethbridge, Gleichen, Tofield, Viking, Chauvin, High River, Nanton, Okotoks, Spedden, Smoky Lake, Raymond, Elk Point, Derwent, Myrnam, and Musidora.

Report of the Recorder of Brands

(S. G. CARLYLE)

During the year 245 horse brands and 704 cattle brands were recorded by their respective owners, while 106 transfers and one change were registered. In addition, 3 sheep brands and 2 poultry brands were recorded. Certified extracts of brands numbered 2, searches 14, strays 2,961, and renewals 2,862 (cattle 1,698, and horses 1,164); the total number of transactions being 6,900.

Compared with 1931, these transactions show a decrease of 7 horse brands, 1 change, certified extracts 7, searches 8, strays 1,528, and renewals 521; with an increase of 64 cattle brands, 3 sheep brands, 2 poultry brands, and 3 transfers.

The number of brands issued to date are as follows: Two-character cattle brands number 7,192, horse brands 39,165, cattle brands 59,476, making a total of 98,641.

Report of the Field Crops Commissioner

(E. L. GRAY)

Field crops production of Alberta in 1932 was of uniform distribution, average yield, and high quality. No large areas suffered complete crop failure, as was the case in 1931, and even the small sections which did not harvest crops were few in number. The spring season opened unfavourably, there being a distinct shortage of moisture and a continued threat of high winds, but a heavy snowstorm in late April made ideal seeding conditions, stopped soil drifting, and hastened early growth. The mid-summer was marked by periods of prolonged drought in the extreme northern and southern sections of the Province, reducing yields in those areas. Unsatisfactory harvesting conditions, light rains and snow, delayed operations in the southern central area; a considerable percentage of the crop between Red Deer and Calgary went into the winter unthreshed. The quality of all crops was high, the greater percentage of the wheat marketed grading No. 2 Northern or better. The prices were uniformly poor; at the close of the year street prices at average points approximated 23 cents per bushel for wheat, 15 cents per bushel for barley, and 11 cents per bushel for oats.

The estimated production of seven leading field crops in the Province was:

Wheat	164,000,000 bus.	Timothy	550,000 lbs.
Oats	101,500,000 "	Alfalfa	75,000 lbs.
Barley	19,700,000 "	Sugar Beets	150,000 tons
Rye	1,988,000 "		

CEREAL CROP IMPROVEMENT.

Seed Grain Distribution.—In 1931 severe droughts occurred in many districts of Saskatchewan and in the south-eastern sections of Alberta. In January, 1932, arrangements were made to ship seed oats from the Peace River district to Saskatchewan. To facilitate the shipment, the Alberta Department of Agriculture gave the services of District Agriculturists at Grande Prairie and Falher, and stationed a special fieldman at Fairview; all available grain-cleaning equipment was shipped to points requiring same; a clerical service was established in Edmonton to co-operate with the railways and the Bank of Montreal in expediting settlement for the grain. The Saskatchewan Relief Commission paid shippers 29 cents per bushel for No. 1 or No. 2 seed oats. Approximately 1,230,000 bushels were shipped.

In March arrangements were made to supply seed to needy farmers of Alberta. The Department of Agriculture secured, through the services of grain companies, 212,959 bushels of wheat, 171,119 bushels of oats, and 6,132 bushels of barley, which were supplied on order of the Department of Municipal Affairs to farmers concerned. The wheat was delivered direct from elevators; oats and barley were shipped whenever necessary.

The purchase from both provinces for seed grain relief practically absorbed all supplies of good seed oats and barley in Alberta; supplies of seed wheat were materially decreased.

Marketing Registered and Certified Seed.—The Field Crops Branch gave a marketing service to the growers of improved stocks of registered and certified seed, and to purchasers of such seed. Sales were effected direct from grower to buyer; the central cleaning plant in Edmonton did not operate, and no stocks were stored; the quantities distributed were:

Registered and Certified Wheat	5,160 bus.
Registered oats	6,200 "
Registered barley	820 "
Registered alfalfa	6,500 lbs.
Sweet clover	1,800 "
Brome	5,100 "
Western Rye	1,250 "

District Grain Cleaners.—The five cleaners placed earlier continued to operate successfully. Single-unit machines were placed at Beaverlodge, Sexsmith, Fairview and Brownvale to assist in cleaning seed for relief orders. During the year Beaverlodge unit was moved to Fairview to give complete equipment there. The Sexsmith unit was transferred to Debolt; the Brownvale unit was recalled. The Raymond equipment was moved to Sangudo in October. The work of the machines during the year was as follows:

Cleaner.	Bus Cleaned.	Cleaner.	Bus. Cleaned.
Vegreville	62,720 bus.	Brownvale	3,000 bus.
Lacombe	20,500 "	Sexsmith	5,000 "
Raymond (Sangudo)	6,800 "	Beaverlodge	40,000 "
South Edmonton	31,700 "		
Grande Prairie	40,000 "	Total.....	249,120 bus.
Fairview	39,400 "		

Field Crop Handbook.—Realizing the need of having in readily accessible form information on important phases of field crop work, the Department issued a handbook in March, dealing with varieties of farm crops, seed grain, barley improvement, alfalfa growing, grasses and legumes, farm machinery, soil drifting, crop rotation, etc. The subjects were treated by officials of Dominion and Provincial Departments of Agriculture and the University of Alberta.

Fall Rye Distribution.—In 1931 five car-loads of fall rye were distributed in central eastern sections of the Province to increase pasturage and feed, and for "stripping" to prevent soil-drifting. Very excellent results were obtained, as shown by a survey of Department field men in August, 1932; these are summarized as follows:

	Acres Seeded	Acres Pastured	Acres of Hay	Acres cut for Grain	Total yield of Grain.
Acme, Carbon	1,120	350	200	460	16,000 bus.
Starland	700	400	100	130	5,000 "
Craigmyle	730	300	150	200	5,500 "
Sunnynook, Cessford	2,000	500	800	500	10,000 "
Totals	4,550	1,550	1,250	1,290	36,500 bus.

FORAGE CROP IMPROVEMENT.

Seed Distribution.—Early in the year the Dominion Department of Agriculture made available funds to supply selected farmers with seed for a limited acreage of forage crops. The programme was under the direction of a forage crop committee, consisting of the Chief Inspector, Dominion Seed Branch, the Professor of Agronomy, University of Alberta, and the Field Crops Commissioner.

Each farmer applying was supplied seed of a legume and a grass, upon contract to return pound for pound from the first seed crop produced, with the option of paying for the seed at one-half its cost price in cash within two years from the date of delivery. Applications for the seed were received by the Field Crops Branch; land inspections were made by Department fieldmen. The extent of distribution may be summarized as follows:

Crop.	No. Participants	Approx. Acreage
Alfalfa	192	1,583
Brome	116	1,184
Western Rye	87	361
Sweet Clover	71	785
Others	70	476

Agricultural Schools Alumni.—In 1931 forage crop seed was distributed to 304 members of Agricultural School Alumni Associations. Reports on the results of this distribution were obtained in 1932, showing as follows:

No. obtaining good stand legumes.....	50%
No. obtaining good stand grass	45%
No. obtaining fair stand legumes.....	35%
No. obtaining fair stand grass.....	34%
No. obtaining poor stand legumes.....	15%
No. obtaining poor stand grass.....	21%

Publications.—The Branch distributed 500 copies of the circular "Seeding Grasses and Legumes" and of "Seeding Alfalfa," prepared in 1931. Leaflets on the seeding of those seeds distributed by the Forage Crop Committee were prepared by Dr. J. R. Fryr, University of Alberta, and sent to each farmer receiving seed. A leaflet on the "Harvesting and Cleaning of Brome Grass and Western Rye Grass" was prepared by the Branch, and distributed in the late summer.

JUNIOR CLUBS.

Junior clubs in field crop projects were increased in 1932. Co-operating in club organization were the Alberta Wheat Pool (Wheat clubs), the United Grain Growers, Limited (Oat clubs), the Canada Malting Company, Limited (Barley clubs), the Grimm Alfalfa Growers' Association, Limited (Alfalfa clubs), the Alberta Seed Growers' Association, and the Alberta Branch, Canadian Seed Growers' Association. Club activities may be summarized as follows:

Crop.	No. Clubs.	Membership.
Wheat	25	378
Oats	19	271
Barley	5	36
Alfalfa	23	398
Corn	1	14
Total.....	73	1,097

No. of field days, 24; seed fairs, 32; cleaning demonstrations, 23.
 Winner, National Club Trip, Willingdon Club (Geo. Fediuk, Geo. Shewchuk).
 Place won in National contest, 4th.
 No. winners efficiency prizes, 60.

The junior club members won 28 prizes at the Royal and International exhibitions. Inter-club classes were provided at the Provincial Seed Fair. The Department paid the transportation of efficiency winners to Edmonton during the Provincial Seed Fair for a three-day short course. The Edmonton Chamber of Commerce provided accommodation for them while in the city.

COMPETITION AND EXHIBITIONS.

Field Crop Competitions.—Owing to financial conditions in the Province, and to reductions in Dominion Government subventions, the payment of grants for field crop competitions was discontinued in 1932. Despite this, competitions were sponsored at Hanna, Castor, Stettler, Morrin, Craigmyle and Whitla; the Department supplied judges and prize ribbons to the fifth placing.

Local Seed Fairs.—Grants were discontinued for local seed fairs. Judges and ribbons were supplied for fairs at Morrin, Lethbridge, Olds, Camrose, Wetaskiwin, and Bindloss.

Royal and International Exhibitions.—The Department paid the entry fees at the former, and duplicated prize money won at the latter, paying shipping charges on exhibits to both. Special honoraria were paid for firsts and championships at the International. The results were as follows:

	No. of Entries	No Prizes Won	No. Prizes above 10th
Toronto	60	45	44
Chicago	52	68	36

Provincial Seed Fair.—The Provincial Seed Fair was held at 9722 102nd St., Edmonton, January 10th to 13th. Meetings of seed grower organizations, live stock breeders' associations, and an agricultural short course were held at the same time. The scope of the fair was:

	No. of Exhibitors	No. of Exhibits
Wheat classes	236	256
Oat classes	147	166
Barley classes	51	57
Corn classes	36	47
Other crops	90	147

World's Grain Exhibition and Conference.—A steady programme to interest Alberta farmers in this exhibition was carried out during the year. The lantern slides supplied by the management were used at 35 meetings. Three radio addresses were given. Approximately 1,000 grain samples were received at the office, and advice given on their suitability for exhibition. Two hundred and four hand screens were supplied to farmers preparing grain. Approximately 3,500 circulars and letters concerning the show were mailed. The Department agreed to pay one-half the entry fees of Alberta exhibitors. The selection of junior grain judging teams received consideration at all junior farmer meetings throughout the year.

WEED CONTROL.

Weed Legislation.—The Noxious Weeds Act, Alberta, 1932, was passed by the Legislature.

Publications.—The Weed Bulletin was revised early in March, and 2,500 copies were mailed during the year, a policy of mailing only upon receipt of written requests being adopted. Coloured posters were supplied in large numbers to schools and inspectors requiring same.

Lake Shores.—The Department co-operated with 32 municipal districts in weed destruction on lake shores, sharing costs equally with them.

Act Enforcement.—Under the new Act the following organization and work was completed during 1932:

No. of Weed Inspectors appointed	37
No. of Municipal Districts appointing Inspectors	127
No. of Towns and Villages appointing Inspectors	33
Total Municipal Weed Inspectors appointed	310
No. Screening Permits issued	125
No. cars settlers' effects inspected	88
No. destruction orders and memos issued (Provincial Inspectors only)	586

Advisory Weed Board, etc.—The Provincial Advisory Weed Board did not meet during the year. Special prizes to school fairs for weed collections were discontinued. The chemical control research programme, carried for three years in Southern Alberta by Mr. W. G. Smith, was concluded during the autumn.

Sow Thistle Survey.—A record of all sow thistle patches found in 1931 was made, and these patches were checked in 1932. Ten thousand two hundred and seventy-five patches were under observation, and their destruction or development further noted.

GRASSHOPPER CONTROL.

The grasshopper outbreak of 1931 became more widespread in 1932. Control measures had to be taken early in June, and were continued until late in August. Hatchings of the insects were most irregular, prolonging the necessity for poisoning. Approximately 1,112,600 acres of crop in 41 municipal units were affected by the outbreak, with an estimated loss of 10 per cent.

Control measures by the Department were as follows:

Poison bait supplies purchased: Bran	2,135,800 lbs.
Sawdust	1,416,000 "
Salt	246,050 "
Arsenic	206,335 "
Other material	80,955 "
Total wet bait (estimated)	8,161,300 "
No. of Mixing Stations operated, 28; No. of Supervisors employed, 6.	

Approximately 2,500 leaflets on grasshopper control were sent out during the season.

ALBERTA SEED GROWERS' ASSOCIATION.

The officers of the Alberta Seed Growers' Association for 1932 were: President, C. C. Gillies; Directors, L. C. Anderson, R. R. Baird, D. H. Bark, P. W. Billwiller, and E. L. Gray; Secretary, E. H. Buckingham. Total membership for the year was 566.

PROVINCIAL SEED BOARD.

The Board held one meeting during the year. Members were: Messrs. G. M. Stewart, H. A. Craig, O. S. Aamodt, W. H. Fairfield, C. C. Gillies, and E. L. Gray, Secretary.

GENERAL.

Speakers from the Field Crops Branch attended a total of 182 meetings during the year. Mimeographed and printed circulars in connection with the subjects of this report to the number of approximately 12,000 were mailed.

Report of the Provincial Veterinarian

(DR. P. R. TALBOT)

As in former years, the work of this Branch has comprised the prevention, control and eradication of diseases in Alberta, not handled by the Dominion Government, the general supervision of the health of live stock in this Province, the particular supervision of the health of animals at the different Government institutions, lecturing on Veterinary Science at the University of Alberta and on diseases of live stock at the various Provincial Government Schools of Agriculture, the investigation into various animal diseases in different parts of Alberta, and the carrying on of experiments in conjunction with the National Research Council and the University of Alberta.

ABORTION.

There is no doubt that contagious abortion is causing considerable loss throughout the Province, especially in dairy herds. Many different methods of control are being advocated, and as we explained in our 1931 annual report, the careful disinfection of buildings and the separation of the animals that react to the agglutination test will control this disease to a very large extent. However, this method is costly and inconvenient, and few farmers can afford to follow the schemes suggested by many authorities who are depending entirely upon cleaning up the condition by serological tests. For that reason it was recommended at the last meeting of the Veterinary Association of Alberta that the University prepare a vaccine which could be used by the practitioners in herds where the outbreaks are particularly virulent. Many are availing themselves of the opportunity of getting this vaccine, and so far, they believe that the results have been satisfactory. It is the intention to gather all the material together in relation to these herds, and at the next annual meeting of the Veterinary Association of Alberta to compare the results, and see if the efforts along this line have been worth while.

SWINE DISEASES.

From the observations we have made, we believe that a large number of young pigs are lost each year before weaning time, but the causes are so varied that they cannot be enumerated here. During the past year a bulletin was published by the University of Alberta on Swine Production, and we were requested to add something in the way of swine diseases. We chose those that are common in the Province of Alberta, and a brief synopsis of the causes, symptoms and treatments of these were given. The following is a list of the diseases mentioned in the bulletin: Aberration of the Appetite, Hemorrhagic Septicemia, Anaemia in Young Pigs, Hairlessness in Pigs, Thumps, Stomatitis, Agalactia, Feeding of Orphan Pigs, Lousiness, Sunburn, Worms in Swine.

INFLUENZA (*Horses*).

Unfortunately, there was a large number of cases of this condition throughout the Province during the past year. This was particularly noticeable in the districts north and west of Edmonton. The disease usually occurs in districts that have recently been opened up for settlement and not on farms where the land has been broken up for a considerable time, and where the horses have been bred on a particular farm for one or two generations. Many cases have been reported where the animals have been brought in from the southern part of Alberta and taken into northern areas. These horses seem to be particularly susceptible to the condition, and the losses have been quite high. I believe the general opinion is that the disease can be largely prevented by allowing horses to have access to pure drinking water, and keeping them away from sloughs or ponds containing stagnant water. In the way of prevention, it is thought that vaccines have some beneficial effect, not only as curatives, but also as preventives. However, like all other biological preventives, they must be administered scientifically and early enough to produce an immunity before the animals are exposed to the organism producing the disease.

HEMORRHAGIC SEPTICEMIA.

This disease is common in both cattle and swine throughout the Province. It is seen particularly in the former, when the animals are being moved early in the winter to feeding lots. Vaccination with hemorrhagic septicemia vaccine, providing it is administered ten days or two weeks prior to shipping, has apparently given excellent results in the way of prevention. We also find many of these outbreaks occurring in herds of cattle that are being fed mouldy or spoiled feed, and numerous outbreaks have been traced to this source. It should be remembered that we have two types of the disease in cattle, one affecting the respiratory organs and the other is seen in connection with the digestive tract. Vaccination is effective in both forms of this trouble.

This condition is also common in swine, but when an outbreak occurs on a farm, if the owner would isolate the affected animals and carefully disinfect his premises, we believe that the disease will run its course in a very short time. There is no doubt that vaccination with hemorrhagic septicemia vaccine gives beneficial results, but if a man has a large number of animals the cost would be considerable.

TUBERCULOSIS.

The Provincial Government, University of Alberta, and the National Research Council of Canada have been carrying on a number of experiments in connection with tuberculosis. Several herds of cattle are being vaccinated with apparently satisfactory results. The young animals are vaccinated as soon as they are born, and in this way it is hoped that an immunity will be built up against tuberculosis. These experiments are under the direction of the committee that was appointed by the Minister of Agriculture some years ago, and consists of the following:

Dean of the Faculty of Medicine and Professor of Bacteriology and Hygiene, University of Alberta.

Deputy Minister of Health, Edmonton.

Associate Professor of Bacteriology, University of Alberta.

Assistant Superintendent of the Provincial Mental Hospital.

Professor of Pathology and Provincial Serologist, University of Alberta.

Medical Superintendent, Alberta Tuberculosis Sanitarium.

Provincial Veterinarian and Professor of Veterinary Science, University of Alberta.

Report of Stallion Enrolment Branch

(DR. P. R. TALBOT)

It will be noticed from the following report that during the past season there was a considerable increase in the enrolment of stallions over the last few years. There is no doubt that the financial situation is doing a great deal to bring back the horse business. Farmers are finding it much more economical to use horses than tractors, and many stallions that have not been on the road for several years were travelled in different districts last season. In certain sections of Eastern Canada it would appear as if there is going to be a market for a particular type of horse that is raised successfully in Western Canada, as sales in various parts of the southern and central parts of Alberta have indicated that the buyers from the east desire a certain type of animal for their work. We have endeavoured to improve the horse business by careful inspection and by the enforcing of The Stallion Enrolment Act as far as possible, especially in the thickly populated sections of the Province, and we hope that by so doing an improvement in our horses will result.

Very great credit must be given to the Dominion Government in its schemes of stallion clubs and bonuses for stallion owners. No doubt this will have a beneficial effect upon the future horses of this Province, and it is regrettable that more good horses are not available for further extension of the above-mentioned policies.

The use of thoroughbred stallions for breeding remounts and polo ponies is developing rapidly, and is particularly popular in certain districts. The meetings of the different thoroughbred associations are exceedingly popular and are well patronized, and there was a decided increase in the interest shown this fall in the meeting called by the Northern Alberta Thoroughbred Horse Breeders' Association. The success of the breeding of grade mares to this class of stallion depends entirely upon the selection of these mares, and we would like to offer a word of warning that the mares so used should be selected with great care if anything is to be accomplished along these lines.

The following is a list of the stallions enrolled in the years 1931 and 1932, according to breed:

1931. 1932.		1931. 1932.	
Percheron	183 246	Standard Bred	2 3
Clydesdale	83 135	Suffolk	3 6
Belgian	59 84	American Saddle	1 2
Thoroughbred	21 18	Hackney	1
Shire	10 18	Jack	 1

Report of Farms Branch

(J. F. ANDREW)

The 1932 crop season commenced under very favourable circumstances. Moisture was plentiful and germination very satisfactory. Early growth was luxuriant, and while a dry summer reduced yields at Oliver and Vermilion, crop production was on the whole slightly above average. Conditions were most favourable at Olds and Raymond, and heavy yields were obtained. Continued rains interfered with threshing operations at Olds, and some grain is still in the stook. The total production of field crops is as follows:

Oats	32,505 bushels.	Tame Hay	210 tons
Barley	6,815 "	Straw	500 "
Wheat	11,598 "	Beets	552 "
Sweet Clover	117 tons	Green Feed	94 "
Alfalfa	325 "	Ensilage	417.5 "

Commencing April 1st, the farms and equipment at Claresholm and Gleichen were leased on a crop share basis and live stock removed or sold. Operations at the Youngstown farm have been reduced to a minimum. The major part of the farm has been seeded to permanent pasture, and the only live stock maintained in addition to work horses is a flock of 75 Shropshire sheep.

The past year has been very satisfactory from the standpoint of live stock on Provincial Farms. One hundred and forty registered breeding animals were sold to farmers in the Province. Four hundred and forty-five head were sold through the ordinary market channels, and 60 were slaughtered on the farms for use in school dormitories, boarding houses and the Oliver Mental Hospital. Increase of all classes of live stock has been very satisfactory. A brief record of the live stock at each farm follows.

OLDS FARM.

The Shorthorn herd, headed by two excellent imported sires, constitutes the most import part of the live stock. The young stock is of good quality, and progress being made is gratifying. During the past year 20 pure-bred Ayrshires were brought in from Claresholm, and in addition there is a small herd of Guernseys. A carload of Aberdeen-Angus steers, purchased from the Aberdeen-Angus breeders of this Province in the fall of 1931, was fed and exhibited at the Royal Winter Fair, November, 1932. This carlot formed a very attractive exhibit, and was placed second in strong competition.

Shropshire sheep and Yorkshire swine are maintained on this farm. A number of the Yorkshire sows were entered in the Advanced Registry for Swine under the Dominion Government supervision during the year.

The horses are practically all Percherons, there being nine registered mares on the farm. The stallion "Job," No. 84808, was sold during the past year.

OLIVER FARM.

The Holstein herd at this farm has made good progress during the year, both from the standpoint of production records and increase in numbers. "Muriel Ball Alcartra 2nd," No. 62889, has not only produced a yearly record of 26,711 lbs. of milk and 961 lbs. fat, but has a four-year average of 18,929 milk and 667 lbs. fat. Her fifth year of production, now nearly completed, will increase this average. Forty calves were born during the year, sired by "Colony Posch Paul," No. 605777, a sire of proven merit, and "Montvic Korndyke Rag Apple," No. 91110, a son of the four times All-American Champion. "Johanna Rag Apple Pabst," owned by T. B. McCauley, at Mount Victoria Farm, Hudson Heights, Quebec.

Clydesdales from Oliver were successfully exhibited at the Edmonton Summer Fair and the Royal Winter Fair. Some very promising young stock is being reared, sired by "Emigrants Masterpiece." This stallion was placed with the Vermilion-Manville Horse Breeders' Club during the months of June and July.

In addition to the horses and cattle already mentioned, a herd of Tamworth swine and a flock of Hampshire sheep are maintained. Surplus breeding stock from these has been in keen demand.

RAYMOND FARM.

Oxford sheep and Tamworth swine constitute the only pure-bred live stock at present. The Hereford and Holstein cattle were sold during the year. During the past year 100 range calves were placed on experimental feeding for the purpose of determining the relative value of certain rations and feeding practices. At present a similar number is being fed and cost accounts being kept. This work is done at the suggestion of the Red Label Beef Association.

VERMILION FARM.

The dual purpose Shorthorn herd, headed by "Neralcam Dominator," No. 181833, is making favourable progress, there being a number of excellent milk records made, and 24 calves reared during the year. The young stock is very promising, and for the first time in the history of the herd entries were made at the Royal Winter Fair. The two animals entered were very successful, the senior bull calf "Dominator," No. 211231, winning first in his class, Junior Championship and Reserve Grand Championship. The two-year-old heifer "Cambus Dairymaid 3rd," No. 247492, was placed third in strong competition.

For many years Oxford sheep and Yorkshire swine have been maintained at this farm. During the past summer, recognizing the popularity of the Suffolk breed of sheep, a small flock was purchased, and it is hoped that a good flock of these sheep may be built up.

The majority of the horses are grade Clydesdales, but there are in addition four registered mares. These were bred to the stallion "Emigrants Masterpiece," owned by the Department, during the past season.

A number of experimental projects are carried on at the various farms. Mention has already been made of the steer-feeding work being conducted at Raymond. In addition to this, cross-breeding for the production of market lambs has been carried on, also cost accounts have been kept in connection with various pure-bred and cross-bred swine. The Provincial Veterinarian has used live stock at these farms to a limited extent in connection with investigational work. In addition to the experiments already mentioned with live stock, certain new types of pastures and forage crops are being tested under the field conditions, and an attempt has been made to secure information with regard to the use of certain new types of farm machinery.

Report of the Poultry Commissioner

(G. M. CORMIE)

It was not until January, 1932, that the market prices for eggs and poultry products joined the general landslide of prices of agricultural commodities. The spring and summer of 1932 will go on record as a period of unprecedented low values for eggs and poultry meat. Prices away below the cost of production prevailed.

It is interesting to note, however, that during the three fall months, October, November and December of 1932, egg prices improved to such an extent that egg production was quite profitable, and a large percentage of the farmers in the Province obtained a great portion of their living from the sale of eggs. The prospect for a good market during the spring and summer of 1933, while it is likely to be better than last year, is not encouraging, chiefly because those whose business it is to store eggs in the period of flush production for consumption during the period of low production did not, on the whole, make a satisfactory profit, and there will not be any tendency on the part of such buyers to pay a much higher price than last year.

The total exportable surplus of eggs sent out of Alberta in 1932 was 45,842 cases as compared with 69,665 cases in 1931. At the same time the imports show a decrease of 1,000 cases.

While the shrinkage in exportable surplus would indicate a considerable drop in production, it is believed that home consumption is very much greater than formerly on account of low prices, and on account of the reduced buying power of the public, who consume their eggs and poultry meat at home rather than buying cured meats and other products. According to Federal statistics, the poultry population of the Province is reduced from 15 to 20 per cent. under that of 1931.

Poultry meat prices followed the general price levels which were obtained for eggs, and until the exchange situation between Canada and Great Britain is adjusted, there is not likely to be any great improvement in egg and poultry prices.

POULTRY FEDERATION.

The organization in 1932 of the Alberta Poultry Federation, the executive of which constitutes the Alberta Poultry Council, makes a definite progressive step in the poultry industry of the Province.

The Poultry Federation comprises practically all of the poultry breeders' organizations of the Province, including the Alberta Bronze Turkey Breeders' Association, the Alberta Registered, R.O.P. and Approved Flocks Association, the various poultry and pet stock associations, the Alberta Accredited Flocks, and individual poultry breeders.

A selling agency connected with the Alberta Poultry Federation is partly under way, and is already functioning in the sale of turkeys and bred-to-lay poultry. It is intended during the coming year to extend this feature of the Federation so that it may include all kinds of poultry breeding stock, hatching eggs and baby chicks.

In December of 1932 the Poultry Federation published their first annual catalogue, which is a comprehensive volume carrying the advertising of many of the members and of commercial concerns interested in the production, manufacture, distribution or sale of poultry supplies and equipment, and containing directions for the feeding, care and management of poultry.

This catalogue, it is believed, will be of great value to the farmers of the Province, as a guide in the selection of good breeding stock.

TURKEYS.

Of recent years Alberta has made great progress in the development of the turkey industry. The policy of the inspection and banding of breeding stock, in co-operation with the members of the Alberta Bronze Turkey Breeders' Association, has resulted in continued improvement in the quality, as indicated by the quality of market turkeys offered for sale, and particularly by the prizes won by members of this association at the local poultry shows, and at the Royal Agricultural Winter Fair at Toronto. At this show, in 1932, for the second year in succession, Alberta won the Grand Championship for the best turkey exhibited, as well as: First adult male, first yearling male, first young male, second yearling male, fourth yearling male, fourth young male, third young hen, sixth young hen, with an exhibit of 13 specimens.

The breeders of small poultry also made a very creditable showing at Toronto, where the following prizes were won: 9 firsts, 6 seconds, 8 thirds, with an exhibit of 66 birds.

Great credit is due to the efforts of Mr. P. J. Timms, Secretary of the Provincial Poultry Association, and the Secretary of the Alberta Bronze Turkey Breeders' Association, in getting together and arranging for the exhibiting of birds to be forwarded to the Toronto show.

POULTRY PROMOTION.

The regular schemes as employed in Alberta for the promotion of the poultry industry, including the Accredited Flocks organization and the Approved Flocks, show normal progress during this period of depression, and while the raising of poultry has not been particularly profitable, there are instances recorded where satisfactory returns have been obtained, and the morale of the poultry raisers of the Province continues to be quite encouraging. There seems to be no tendency to greatly reduce poultry holdings; in fact, in some districts there has been a considerable increase in poultry.

A movement is on foot at the present time, sponsored by one or two of the Accredited Flock groups, to increase poultry production to a point where car-loads of winter new-laid eggs can be shipped to the eastern markets. This has been brought about largely on account of the organized breeders finding the local mar-

kets insufficient to take care of their increase in supply during the fall and winter months.

ALBERTA POULTRY POOL.

In the fall of 1932 the Alberta Poultry Pool found it desirable to move its headquarters to Camrose and to close out its distributing business in the large centres. This organization is now established on a basis that promises to be of increasing value to the farmers of the Province as a medium in assisting to control prices, and through it a considerable amount of the surplus poultry of the Province can be efficiently marketed.

LECTURES, DEMONSTRATIONS AND LITERATURE.

During the year a large number of poultry lectures and demonstrations were provided in different parts of the Province, and lecturers in poultry attended many of the agricultural short courses held.

In the fall of 1932, a definite effort was put forward to demonstrate the most up-to-date methods of killing, dressing, and preparing poultry for market. This particular line of effort met with considerable success, as indicated by the attendance at the meetings, and the quality of the product ultimately marketed at points where these demonstrations were held. Bulletins and pamphlets dealing with the housing, feeding and management of poultry were distributed to anyone asking for same.

POULTRY FARM.

The Poultry Farm operated by the Alberta Department of Agriculture at Oliver is maintained as a demonstration and experimental farm, as well as a supply station for the Mental Hospital adjoining. It also constitutes a source from which farmers of the Province can secure a limited supply of breeding stock.

In addition to Bronze Turkeys, Barred Plymouth Rocks, White Plymouth Rocks, White Wyandottes, White Leghorns, and Single Comb Rhode Island Reds are carried at the present time, Rhode Island Reds having been added during the past year. About 800 birds are trap-nested each year, from which is selected the breeding stock for the following year. Only cockerels from hens with records over 200, and mostly 250, are used, and for the 1933 breeding season there will be 10 male birds from hens with records over 300 heading some of the breeding pens.

A turkey from the Alberta Department of Agriculture flock won the Grand Championship at Toronto. The first prize young tom at Toronto, from the same flock, is a son of the grand champion.

The Poultry Farm is co-operating with the Poultry Branch of the University in carrying out a number of experiments. These will be reported on from time to time by the University.

Report of the Provincial Apiarist

(S. O. HILLERUD)

The honey crop for 1932 was estimated at 550,000 lbs., a decrease of 365,000 lbs., as compared with last year. Total crop failure was reported from the north-eastern sections of the Province and partial failure in all commercial areas. The beekeepers of Calgary and the Hillspring districts reported normal or above normal crops.

The number of beekeepers showed a satisfactory increase considering financial conditions. Registrations for 1932 total 325, as compared with 187 for 1931. The tendency toward increase was noted last year, and an effort to meet the needs of beginners was partially met by a series of day short courses held at seven centres. Mr. D. A. Andrew, of the Vermilion School of Agriculture, assisted at all meetings, and Mr. H. T. Luther, of the Dominion Experimental Farm, Lethbridge, was with us at the Calgary, Hillspring, Glenwood and Lethbridge meetings, through the courtesy of Dr. Fairfield. The co-operation of Dr. Fairfield and Mr. Luther has been extremely valuable in all phases of the work in the southern part of the Province. Mr. Life, of Lacombe, assisted at the short course held at the Lacombe Experimental Farm, and Miss Storey, of the Vermilion School, gave a most interesting talk at the Vermilion short course on the uses of honey. The attendance at these meetings was as follows:

June 20, 1932—Vermilion	32
" 21, " —Edmonton	31
" 22, " —Lacombe	13
" 23, " —Calgary	29
" 25, " —Lethbridge	14
" 27, " —Glenwood	20
" 27, " —Hillspring	25
Total.....	164

In addition to the above meetings, field days were also held at Calgary, Edmonton, Cassils, and Okotoks.

Disease: The Apiculture Branch was formed to assist beekeepers to cope with disease, and naturally the bulk of the funds available has been spent in the commercial areas. This year, however, knowing that the commercial men were acquainted with the symptoms and methods of control, I felt that more attention should be given to the non-commercial areas, particularly since I was satisfied, from observations, that disease was developing from package bees that were shipped into the southern part of the Province, which meant steady re-infection. However, later in the season it appeared that some of the beekeepers were not ready to adopt sound, though somewhat expensive, methods of handling their equipment, and consequently I did not feel justified in making further inspections. In a letter written to me December 20th, 1932, A. P. Sturtevant, of the U.S. Bureau of Entomology, states that two years' work has shown "that packages which have been in transit as long as seventy-two hours are capable of producing disease, even when the bees are

placed on foundation." This will undoubtedly lead to action on the part of the better shippers, and more care on the part of the beekeepers.

Nosema, which in our opinion may indicate poor wintering rather a virulent disease, was found in the Edmonton district, and was definitely determined as such by Prof. E. H. Strickland, of the University of Alberta. This disease appeared to be strongly evident west of Lake Wabamun, and in the Pembina Valley it was noticed that several small apiaries were completely deserted, although it was found on closer inspection that there remained in the hives several combs of dead broods and quite an abundance of honey. Dr. Shaw, of the Bacteriological Department of our University, has continued to examine such samples of comb as required microscopic examination for determination, which has been a great help, since the Apiculture Branch has no facilities as yet for this work.

The sugar-beet webworm moth outbreak was at its height during the break in the nectar flow in the Brooks and Lethbridge areas, but it has been suggested that this was a coincidence, and that drought was the real cause of the decrease in this year's crop. In discussing this matter with Dr. Forbes, of Cornell University, however, he assured me that the types of moth bearing this common name (unfortunately there are four) could, if present in sufficient numbers, take the entire nectar secretion of sweet clover. He also translated the report of Dr. L. Rey, regarding the activity of a beet webworm moth *Loxostige sticticalis*, which utterly ruined the honey crop in Austria in 1921. Therefore, although no study has been made, making it impossible to make a definite statement, there would seem to be good grounds for believing that the beet webworm moth played a part in the decrease of this year's honey production.

During the past season I visited 119 apiaries and examined 1,385 colonies. American Foul Brood was found in the following districts:

District and No. of Colonies.	Possible Source of Infection.
Raymond—1 colony	Package.
Vegreville—2 colonies (in 2 apiaries).....	Comb purchased in U.S.A.
Lavoy—14 colonies (in 2 apiaries).....	Comb purchased in U.S.A.
Manville—2 colonies (in 2 apiaries)	Comb purchased in Manitoba.
Taber—8 colonies (20 others reported destroyed)	Package.
Lethbridge—2 colonies (30 others reported destroyed)	Package.
Iron Springs—9 colonies (in 2 apiaries).....	Infected swarm.
High River—17 colonies (in 1 apiary)	Comb purchased in U.S.A.
Calgary—1 colony	Stored comb from Lacombe.
Glenwood—1 colony	1 comb purchased from Winnipeg.

In all cases, except Glenwood, Calgary and Manville, the comb had been brought in with the settler's effects some years ago, and the original owner had sold the combs in good faith, in the judgment of the beekeepers. The infected apiaries had not been visited by Mr. Chalmers or myself till this year, except in the Lethbridge and Taber districts. There, the sudden and large outbreak in clean apiaries seems to point directly to package infection. A severe outbreak occurred in Brooks, and it was agreed to try new methods of control in the fall, but the owner, on reflection, feared to risk the experiment, and destroyed the infected comb. This outfit will be closely inspected next summer.

Mr. Chalmers reports 1,372 colonies inspected during the season of which 114 had American Foul Brood. A re-inspection of 496 colonies in September revealed only 19 cases of this disease, and all infected colonies were destroyed by fire.

Two radio talks on beekeeping were given this season, one from the Red Deer studio and one from the Edmonton studio in the University.

There were approximately 70 complete sets of our Correspondence Course sent out during the year, and also a number of pamphlets by the Dominion Apiarist.

The School of Agriculture, Olds, makes the following report: In the fall of 1931 two colonies were packed and prepared for wintering outside. In the spring of 1932 these colonies were in good condition, but another colony that had wintered in a cellar was in a very weakened condition; the supplies were exhausted and only a few bees remained. This latter hive was given a few frames of honey and placed on the top of one of the strong colonies with a queen excluder between. The hives were later separated.

There was no record kept of the daily gains or losses. A swarm which came off during the second week of July was hived. The total amount of extracted honey obtained was 220 pounds.

The four hives were packed and prepared for wintering outside, one in a tar-paper case, one in a Kootenay case, and two in a double compartment.

The following is the report of the School of Agriculture, Vermilion: In the fall of 1931, 10 colonies were packed for the winter. Four of these were in a quadruple case, one in a Kootenay, two in a twin case, and three in oversize Krouse cases. All had approximately 60 pounds of honey and sugar. The bees flew very little all winter, and in the spring it was found that only five colonies survived. One was lost through faulty packing, causing the entrance to plug, but in the others the cause of death was hard to determine. The losses occurred in the quadruple case and one of the Krouse cases. The Kootenay brought through the strongest colony both seasons it has been in use.

One of the wintered-over colonies was placed on the scale on May 12th, and on September 16th showed a total gain of 215½ pounds as compared with a hive, in 1931, which was placed on a scale on May 26th and on September 12th showed a total gain of 388 pounds. It will be noted that the duration of the production period in the past two seasons was very similar, but a study of the two seasons reveals that August of 1932 was a very poor month, only seven pounds gain being registered as compared with 10½ pounds for the same period in 1931. Also, the season of 1931 gave a fairly steady flow, while 1932 was very intermittent; 44.4 per cent. of the total gain for the season being produced in four days, July 12th, 13th, 21st and 22nd. (Of course, allowance must be made for the fact that these were nectar gains, not finished honey.)

The chief lesson to take from the past season was the absolute importance of an ample reserve in super-room during the production season.

Report of the Game Commissioner

(S. H. CLARK)

Big Game: The average game conditions throughout the Province may be described as satisfactory. Game, which has its habitat in our National Parks, game preserves and closed areas, shows splendid increase. Sportsmen who have been accustomed to hunting in remote areas have been forced to economize, and game in these districts has been undisturbed. However, as settlement extends into woodland areas, the game is being driven back or killed off. Improved road conditions which makes certain areas accessible for motor traffic have resulted in intensive hunting and a consequent depletion of game.

The closing of the area south of the Saskatchewan and east of the Canadian Pacific Railway, as well as the Gull Lake area, has given satisfactory results, and consideration should be given to closing other areas which are likely to be depleted of breeding stock.

In certain areas the males of the species are becoming too few in numbers, and although there is much controversy over the advisability of opening the season on female moose and deer, I am of the opinion that it would be better to close those areas entirely than to permit the killing of female animals.

In the forest reserves, where most of the hunting is done in September and October, and hunters make trips mostly for recreation with trophies as an incentive, game of all kinds has greatly increased. It is thus proven that, though hunting of this kind has been fairly consistent for the last fifteen years, the taking of the older males has had a tendency to increase and improve the various species of game. The large National Parks and adjacent game preserves also provide the forest reserves with a supply of game from its natural overflow.

In the Pembina-Brazeau Elk Preserve it was found that the elk had increased sufficiently to justify the opening of the season from October 1st to December 14th. A bag limit of one male only with 10 points or over was set out, and about 50 bull elk were reported taken. The results of this hunting were satisfactory, and justifies a further open season in 1933.

Migratory Game Birds: The spring of 1932 provided sufficient rainfall to partially replenish the water levels in lakes and sloughs. This also provided luxuriant growth of vegetation around these breeding areas, and an excellent hatch of ducks was reported. There is also little doubt that the dry seasons of 1930 and 1931, when numerous lakes and sloughs dried up, forced many of the ducks to establish their nesting ground farther north, where the water levels had been affected very little. As a result of the increased hatch within the areas of settlement as well as greatly increased numbers hatching in the north, we had a very satisfactory migration to the

south in the fall. While the smaller species of ducks appeared to be scarce, the supply of mallards, which is our main shooting birds, was greatly increased over previous years. It is also noted that the mallards have changed their habits to some extent, and now feed in grain fields more consistently than in previous years. They have also become educated to the sight of hunters, and each year sees fewer large kills of ducks in one field. It is also noted that hunters are rapidly accepting the sportsman's point of view, and use bird game hunting as an incentive for recreation instead of an effort to secure a large bag of game and a tendency to slaughter.

Upland Game Birds: Sharp-tailed grouse (Prairie Chicken) has increased very satisfactorily throughout the Province, where there is an ample supply of brush for protection. These are essentially a brush bird, and could not survive in the totally cleared areas. The open season during October added to the sport of hunting, and if a good hatch is reported in the spring of 1933, there is reason to hope that an open season may be permitted in the fall.

European Gray Partridge (Hungarian Partridge) is still increasing much more rapidly than it is being shot off. There are few sportsmen who are able to shoot the limit on the Hungarians during the open season. Generally speaking, the Hungarians are very beneficial, and while whole grain provides a portion of their diet, they have not acquired the habit of feeding off stooks to any extent. They therefore do very little damage to crops, and will provide an excellent bird for sportsmen with prospects of becoming greatly increased in numbers.

The Ring-necked Pheasants have been released in various points in the Province, and have migrated considerable distances. Reports from various parts indicate that they are able to survive the winter, although in some cases they have come in for feed to the straw stacks and farm yards. At the Oliver Farm about 400 pheasant chicks were hatched and raised, and part of these will be liberated in suitable areas. It is also hoped to create a demand for baby pheasant chicks, where these can be sold to responsible people who will raise and release them.

Fur-producing Animals: The number of fur-producing animals exported from the Province from July 1st, 1931, to June 30th, 1932, was about 200,000 pelts more than for the year previous. However, fur prices had decreased so that the total value was nearly \$300,000 less than the previous year. It is noted that predatory fur-producing animals are increasing as the supply of rabbits increase. The rabbit cycle reaches its peak about every 10 years, and by 1934 rabbits should contract the disease and become depleted by 1936. The coyote, foxes and lynx will follow this cycle. It is interesting to note that the muskrats also have a cycle much the same as the rabbits. They are now on the increase, and over 500,000 pelts were exported last year. It is not known that the ermine (weasel) have a cycle, but at the present time they are rapidly increasing in numbers, and last year we exported 262,000, with a prospect that for 1933 the export will be considerably over 300,000.

ALBERTA FUR PRODUCTION FOR THE SEASON 1931-1932.

Kind.	No. of Pelts.	Aver. Value of Pelts.	Total Value of Pelts.
Badger	2,255	\$10.25	\$ 23,093.25
Beaver	4,647	9.65	44,843.55
Wolverine	6	6.75	34.50
Ermine	262,091	.53	138,908.23
Otter	140	11.90	1,666.00
Lynx	1,517	15.74	23,877.58
Marten	614	15.95	9,793.30
Skunk	4,887	.90	4,398.30
Bear	409	2.85	1,165.65
Fisher	22	40.00	880.00
Fox (Silver, Black)	9,942	20.00	198,840.00
Fox (Cross)	2,003	25.54	51,156.62
Fox (Red)	4,047	10.42	42,169.74
Fox (White)	21	18.17	381.57
Fox (Kit)	16	1.25	20.00
Fox (Blue)	355	10.37	3,681.35
Mink	5,485	3.58	19,636.30
Muskrat	512,977	.40	205,190.80
Wolf (Prairie)	10,999	7.00	76,993.00
Wolf (Timber)	130	7.35	955.50
Rabbit	10,276	.05	513.80
Squirrel	288,494	.10	28,849.40
Mountain Lion	3	.....	.....
House Cat	347	.22	76.34
Raccoon	24	7.00	168.00
Gopher	24,041	.....	.....
Moose	4	.....	.....
Deer	2	.....	.....
Fitch	25	1.40	35.00
Lynx Cat	1	4.00	4.00
Ground Hog	10	.....	.....
	1,145,888		\$877,331.78

Muskrat and beaver permits were issued south of the North Saskatchewan River, where it was proven to the satisfaction of the nearest Officer of the Royal Canadian Mounted Police that the animals were doing damage. A closer survey will be made of the situation as regards muskrats, as there must necessarily be large lakes which cannot be legally trapped under this system.

Muskrat permits issued	276
Muskrats reported taken	7,805
Beaver permits issued	63
Beaver reported taken	397

Revenue: A decreased number in the sale of resident's bird game and big game licenses due, no doubt, to the depressed conditions, was made up by an increase in the fur tax, so that the total game revenue is slightly above the return for the year ending June 30th, 1931. The total revenue from various sources was as follows:

Resident's Bird Licenses	\$18,357.75
Resident's Big Game Licenses	14,388.00
Fur Tax	45,681.00
Various Licenses, etc.	20,308.17
Total Game Revenue.....	\$98,734.92

Fur Farming: The fur farm industry has developed into an important asset to the Province, and although greatly reduced prices have been discouraging, reports show that reduced expenditure in the feeding and management of fur farms have kept pace with the reduced values of furs. It is, therefore, encouraging that the better grades of furs, particularly foxes, have been sold from the fur farms at a price which gives better returns than other industries at this time.

The appointment of a fur farm inspector for the summer months has given very satisfactory results, and the number of fur farmers have increased by nearly 100, and we now have 350 licensed persons or companies carrying on fur farm operations within the

Province. The number of animals on fur farms as at December 31st, 1932, is given as follows:

Badger	16	Marten	32
Beaver	51	Mink	4,229
Coyote	27	Muskrat	40,766
Fisher	19	Rabbit	108
Fitch	380	Raccoon	77
Fox (Blue)	711	Sheep (Karakul)	92
Fox (Cross)	1,674	Skunk	17
Fox (Red)	525		
Fox (Silver)	21,027	Total	69,770
Fox (White)	9		

The Destruction of Crows, Magpies and Gophers: The Pests Competition was continued with satisfactory results. There were about 200,000 less gophers taken than in 1931, and 80,000 less crows and magpies. There is no doubt that the continuance of this competition is advisable to counteract the increasing number of these pests.

The result of the competition shows the following:

Crows and Magpies	43,614		
Gophers	621,786		
Crows' and Magpies' Eggs	152,773		
Total Destroyed by School Children:		Total Destroyed by Adults:	
Crows and Magpies	33,405	Crows and Magpies	10,209
Gophers	465,223	Gophers	156,563
Crows and Magpies' Eggs	122,925	Crows' and Magpies' Eggs	29,848

Fur Marketing Service: The Fur Marketing Service was continued as in previous years with total sales amounting to \$20,776.81; this consisted of 1,008 shipments from 687 shippers. Greatly reduced prices have curtailed the sale values, and the commission charges show that the service was operated at a slight loss. It was noted, however, that no commission was allowed the Fur Marketing Service for the collection of fur tax. The auction sales are increasing in popularity, and provide a method of handling the beaver and muskrat which are trapped under special permits south of the North Saskatchewan River.

Report of the Supervisor of Boys' and Girls' Clubs

(G. S. BLACK)

During 1932, 26 swine clubs, 14 calf clubs and 5 sheep clubs were in operation. Despite the depressed economic conditions junior live stock clubs made an impressive showing. Organization of new clubs was effected where supervision was possible, and these clubs have made good progress. The demand for new clubs is increasing, and the sentiment throughout the Province is very favourable to junior club work.

Club programmes include lectures on care, feeding and management, in conjunction with live stock judging classes. The improvement noted in club live stock due to better care and feeding is very commendable, and has caused much favourable comment. Many districts are financially unable to import better live stock, but the effect of improvement in feeding practices is shown. As good feeding must be coupled with good live stock to ensure real success, a club may be considered to be making progress if improvement is noted in feeding practices.

Junior live stock work during 1932 showed a marked tendency towards the formation of calf clubs. Swine clubs have in most cases held their own, but the fact that hogs sold at approximately 50 per cent. less than the year previous did not encourage club formation. Interest is also being shown in calf feeding clubs, where the calves are finished on heavy grain rations throughout the winter months, and marketed as choice animals during the early summer. Beef clubs are in the process of organization at Willingdon, Lacombe and Peace River.

During the summer of 1932 several outstanding calf club fairs were held. The Olds Fair was the largest in the Dominion of Canada, 94 head of Holsteins being exhibited by club members. This club covered a radius of 30 miles, and the fact of one breed of cattle being spread over this area argues well for the future of the cattle industry in that section of Alberta.

The Red Deer Club had a strong exhibit of Ayrshire calves. The comment of the judge regarding the quality and numbers led one to believe that Ayrshire cattle are getting quite a foothold in this district. Millet and Clover Bar exhibited Jersey and Holstein calves of good quality, while in the dual purpose type the Falher Club in the Peace River district exhibited calves of the Red Polled breed.

Swine clubs were organized during the past year at Slawa, Viking, Holden, De Bolt and Athabasca, and calf clubs at Clover Bar, Bentley, Millet, Willingdon and Morinville.

A number of field days was held, and all were enthusiastically attended. A combination grain and live stock junior club day was held at the University of Alberta during July, and over 140 members were present. Some of those attending motored over a distance of 75 miles. Amongst the larger short course field days were Lacombe, Edmonton, Falher and Vermilion.

A junior farm club bulletin is being issued quarterly to 2,000 club members. This bulletin contains items of club interest, brief articles of educational value, and in general endeavours to assist in the promotion of club work. Much favourable comment has been received, and the bulletin appears to be well worth the small expenditure necessary.

During the past year further steps were taken in completing the formation of a National Council for Boys' and Girls' Club Work in Canada. Club work across the Dominion has now been placed upon a uniform basis, and assistance is being given by many influential commercial concerns in financing national contests. The National Council has now under its jurisdiction over 22,000 club members. The Province of Alberta is represented on this Council by the Deputy Minister of Agriculture.

Members of four junior clubs represented the Province of Alberta at the National Contests at the Royal Winter Show in Toronto. While these teams were unsuccessful in capturing any championships, they proved serious contenders in every contest, and were worthy representatives of the Province. The teams chosen at the final contests this year were the Grande Prairie Swine Club, Falher Beef Club, Willingdon Grain Club, and Olds Dairy Calf Club. Members of these teams were guests of the National Council while at Toronto, and are to be congratulated upon winning first place in the provincial contests.

Through the courtesy of the Minister of Agriculture, I was able to spend a portion of my holidays during the summer in Washington and Idaho. A study of the methods adopted in these States should prove to be of value in our own club programme. The rapidity with which our work has grown in Alberta received favourable comment from the representatives of the 411 clubs in the United States.

A large number of meetings was held throughout the year, and many farmers were assisted in securing better live stock. The visiting of club members in their own homes paves the way in many cases for the opening up of other lines of farm extension work. An increasing number of enquiries are being received for live stock sires, and in a number of cases we have been able to assist the buyer and seller in getting together.

The Live Stock Branch and the Experimental Farm Branch of the Dominion Government have been ready at all times to assist us in our junior club programme.

Report of the Supervisor of School Fairs

(G. S. BLACK)

School fairs throughout the Province had a very successful year in 1932, 92 per cent. of the associations having completed their year's work. Although a decrease is noted in the total number of exhibits shown, the care manifested in the preparation of exhibits, and the general excellence of the quality of the work has continued to improve. The general interest shown in each district has continued to rate high, and requests for new organizations are being continually received. The attendance at school fairs was very large, the weather, which invariably affects the attendance, being exceptionally fine in the majority of cases.

During the past few years careful supervision has been given to newly organized school fairs. It has been the practice to visit each school at least once in every two years, and, in addition, schools reporting difficulty have also been assisted. In 1931 the work of supervision was materially reduced, and during the past year it has been practically discontinued. It was also found necessary to discontinue the issue of mounting cards, insect pins, and a number of varieties of garden seeds. A supplementary bulletin was issued in 1931 revising the school fair bulletin of the previous year. I believe this bulletin has compensated in some measure for the lack of supervision during the past season. The decrease in the number of entries, as compared to the year previous, can be accounted for by the discontinuing of a number of classes which were overlapping, and our inability to provide the necessary supervision.

The majority of school fairs which are carrying on are very healthy units, and we have a large number of requests from schools wishing to join established school fairs.

Short courses were held during the summer at Vermilion and Olds. These courses cover a period of four days, and are awarded to the boy and girl securing the highest number of points at their respective school fair during the previous year. Some favourable comment has been received from many parts of the Province on the fact that such a course is available for these boys and girls.

Undoubtedly the awarding of scholarship prizes is a big factor in the success and growth attained by the Alberta School Fairs. In many districts school fairs are becoming the main agricultural event of the year. Well-rounded programmes, including activities in sports, judging, elocution and music are held. The number of two-day fairs have increased, and many school fairs report educational contests being held in singing and elocution during the winter months. Assistance has been given at the Normal schools and at several teachers' conventions. An excellent spirit of co-operation

exists between all the members of the Department of Education and our Branch.

The following is a brief survey of school fair activities:

	Fairs.	Pupils.	Entries.
Vermilion	38	2,018	15,637
Sedgewick	10	1,815	7,718
Raymond	21	4,096	22,362
Claresholm	21	4,642	18,086
Oids	39	10,210	37,933
(1932)	129	22,781	101,736
(1931)	139	35,270	160,842
(1930)	135	.....	138,985

Report of the Supervisor of Agricultural Relief

(S. H. GANDIER)

The Relief Division was established early in the fall of 1931 to administer necessary agricultural relief measures, following crop failures in the south-eastern areas of the Province. This is the Division's first report, and includes the last four months of the year 1931 as well as the year 1932.

Fodder Loans.—An Act authorizing loans to farmers of crop failure districts for purchase of feed for stock was passed at the 1932 session of the Legislature, being retroactive to September 1st, 1931, when first loans were made.

The more seriously affected districts were: Area east from Drumheller to the Saskatchewan line and south to the Red Deer River; area from Queenstown south to Retlaw; area from Purple Springs east to the Saskatchewan line and south to the International boundary. Some assistance was also given to a number of homestead settlers in the north who had been moved by the Government from the dry districts in the summer of 1931.

Purchase and distribution of feed under the direction of several field men, commenced Sept. 1st, 1931, and continued to May 31st, 1932. Some 1,200 cars of green-feed, hay and feed oats were shipped in by rail. Feed was supplied to 2,998 farmers.

Movement of Stocker and Feeder Cattle.—Freight costs on stocker and feeder cattle from Calgary and Edmonton Stock Yards to feeding points within the Province are shared equally by the Federal Government, the Province, the railways and the farmer purchasing stock. The tariff is effective throughout the entire year. During 1932, 245 cars were moved from the yards, the total head of stock being 8,781.

Donations of Vegetables.—In a large portion of the dry districts garden and vegetable crops were a complete failure in 1931. In districts where crops were good, the churches, U.F.A. and U.F.W.A. locals, boards of trade, women's institutes and other organizations offered to donate cars of vegetables to the drought areas provided freight charges were borne by the Government. Early in October of 1931 the railways agreed to move donated cars of vegetables free of charge. The Relief Division was responsible for arrangements regarding points of distribution and for shipping instructions. Distribution to needy families was handled by Councils of Municipalities, U.F.A. Local Executives and church organizations. During the fall of 1931 and the following spring, 44 cars were shipped, the majority going to districts south and east of the town of Hanna. A few cars went to points on the Empress line and to the Lomond and Medicine Hat districts. It is estimated that over

2,000 families obtained their winter's vegetable supply from this source.

Free Transportation to Settlers (moving from dry districts).—The general crop failure over a large portion of south-eastern Alberta in 1931, made necessary the renewal of the special tariff providing free transportation to farmers wishing to move to new farm locations in more favoured districts. Under this policy, freight and passenger transportation costs are shared equally by the railways, the Federal Government, and the Province. Movement commenced July 15th, 1931, under the supervision of the Field Crops Branch, but was transferred to the Relief Division on September 1st. All families were inspected by field men as to their need for assistance, and probability of successful re-establishment, before applications were approved. During the summer and fall, 422 families were moved, total shipments being 796 cars of stock and effects.

This policy was renewed for the months of April, May and June, 1932, during which period 133 families were shipped out and 195 cars of stock and effects were moved.

The large majority of these families settled on homestead land in northern areas, including the Peace River country.

Feed Relief (Notikewin district).—Crops in this district were completely destroyed by hail last summer, and the necessity for relief feed grain to bring stock through the winter was brought to the Government's attention in November. After thorough investigation, feed was purchased from farmers outside of the hailed area, and distributed to 57 farmers whose crops had been destroyed.

Relief Settlement Plan.—On June 20th, 1932, the Province entered into an agreement with the Federal Government, whereby families on relief in cities and other municipalities might be placed on the land, on a maximum allowance of \$600 per family, to be shared equally by the Federal Government, the Province, and the municipality from which the settler is moved. The Province ruled that only applicants with reasonable farming experience, and having land to which they might be moved, would be given consideration. A Provincial Board, with the Supervisor of Relief as Chairman, was appointed to administer the policy.

The City of Edmonton was the only city of the Province to approve the scheme. Four rural municipalities recommended several applications. The movement commenced August 15th, and by the end of October 51 families were approved and had proceeded to their farms. Of this number, 48 were from Edmonton. The majority were placed on homesteads west and north of Edmonton. A large number of applications were received during November and December, and held for continuation of the movement in the spring of 1933.

In 1932 fair crop conditions prevailed in the so-called dry districts of the Province. Relief measures which followed the disastrous season of 1931 were not necessary.

General correspondence of this Division has been very heavy during the year. Numerous inquiries concerning all phases of relief to farmers are received every day.

Report of Alberta Women's Bureau

(MISS M. E. STOREY)

The Alberta Women's Bureau has during the year 1932 conducted educational short courses and demonstrations along lines similar to those followed in previous years. It has been a matter of regret that it was impossible to comply with all requests made for courses of this type, but reports from those organizations who secured the desired assistance indicate that this work was very well received.

Demonstrations and lectures were given to the Women's Institutes, the United Farm Women of Alberta, and to a few other community organizations. The following subjects were demonstrated: sewing, foods and cookery, dry cleaning, basketry and interior decoration.

The arrangements made for carrying on this work are as follows: The Department of Agriculture provides the lecturer or demonstrator and pays her travelling expenses and sustenance allowance. The local organizations undertake to advertise the lectures, demonstration-lecture or short course. They provide the place of meeting and some of the equipment (where equipment is required).

The Alberta Women's Bureau work was carried on throughout the summer months:

No. of sewing courses given	28
Total attendance	1,020
Average daily attendance	25
No. of basketry courses given	15
Total attendance	698
Average daily attendance	14
No. of dry cleaning and food courses given	62
Total attendance	1,280
Average daily attendance	22
No. of interior decoration courses given	26
Total attendance	910
Average daily attendance	20
Total No. of places visited	105
Total attendance at all short courses	3,908

During the summer short courses for farm women were conducted at the Schools of Agriculture at Olds and Vermilion. These courses have been held on two previous years, and the numbers in attendance and their enthusiasm indicate their popularity. Eighty-two women attended these courses during the past year. This number shows a considerable increase over the previous year, and it would appear that these courses will for some time at least be a regular part of the year's programme.

The district worker in the Ukrainian settlement in the areas east and north-east of Edmonton reports a very interesting and, we believe, successful year. A complete report of her activities is given separately.

Report of District Worker, Women's Bureau

(MISS H. ROMANCHYCH)

The continued necessity for restriction of the expenditures and the inadvisability of conducting any expansion into new districts curtailed the activities of this office. Therefore, the work has been along lines similar to previous years.

Throughout the year 1932, 67 communities were visited and 396 engagements filled, made up as follows:

Meetings, annual, monthly, executive, etc., with the various clubs.....	171
Talks and classes relating to health, home and community work.....	62
Demonstrations, i.e., in canning, pickling, and sewing.....	66
Lectures and addresses at public meetings, concerts, etc.	97

This office has now become quite established, and many more are now taking advantage of the services provided by it. About 987 letters were answered from this office, made up more or less as follows:

General mail pertaining to this office	447
Requests for various recipes in cooking, baking, canning, pickling, etc.....	221
Handicrafts—orders, etc., etc., mailing out cheques, etc. (the postage and expenses for this work were covered by the individuals)	253
Letters from outside of this Province enquiring as to the nature and duties of this office, and enquiries on various other subjects.....	66

Assistance was rendered with judging handicrafts at Killam and Lamont U.F.W.A. district conferences, and exhibits of handicrafts were sent to the Alberta Handicraft Exhibitions and the National Exhibition at Toronto.

In addition to the regular work, a great deal of time was given to the handicrafts, and close to \$1,200 was disposed of. The best market for this work was found in the eastern part of the United States.

This year more time than ever was spent in personal work and assisting individual cases. There appeared a greater need to do so in order to bring up the standard in general.

Report of Cattle Feeding Supervisor, Lethbridge

(JOHN WILSON)

This work is at the present time in its third season, supervision being commenced about September 1st with an inspection of the farms and feed supplies of applicants to the Red Label Association to feed cattle.

Up to January 1st, 1932, this work had been carried out mostly in the district surrounding Lethbridge. At that time there were about 1,500 head of cattle on feed in the Lethbridge area. These cattle were bred and shipped to the feeders from the following ranches:

W. H. McIntyre Ranch, Magrath: Steer calves and yearling steers.

A. E. Cross, Lundbreck: Yearling and two-year-old steers.

George Ross, Milk River: Steer and heifer calves and yearling steers.

Also one car of yearling Angus steers purchased at Coaldale by the Lethbridge Northern for a feeder located at Iron Springs.

The feeding of these cattle was conducted last winter under very favourable conditions. Weather was good throughout most of the season. There was very few really cold spells, and the cattle did well.

Early in the year market conditions in Canada were not promising, and the Red Label Association took space on board ship in January for over 1,000 head of cattle to be shipped to Great Britain, commencing about April 1st and carrying on until the end of May. The first shipment left Lethbridge about April 10th, and was composed of nearly all the two-year-old steers and some yearlings. In all, about 240 head were shipped. This shipment was very favourably commented upon passing through Winnipeg and also at Montreal, where the cattle were viewed by a large number of people interested in this trade.

Mr. W. McKenzie, manager of the Southern Alberta Co-operative Association here, who handles the selling end of the cattle, received a letter from Mr. Campbell, shipping agent at Montreal, in which he stated that this shipment contained some of the finest cattle that had been loaded at Montreal for shipment to Great Britain in the last thirty years. The shipment went to Glasgow, and was very favourably received, met a good trade, and netted back to the feeders a little better than Canadian price. Another shipment was sent out ten days later, and met even a better market at Liverpool, averaging about 50c per 100 lbs. more than the first shipment, the market having advanced in the meantime. After that shipments were made every week of from 100 to 150 head, until the cattle were all cleaned up about June 10th. Most of the cattle which went out during May netted back 6c at Lethbridge, which was nearly 1c per lb. over the Canadian market.

The last shipment going out June 10th was all baby beef, or finished calves weaned from cows about November, 1931. The striking feature of this shipment was the remarkable weights of these finished calves. One load of George Ross' calves fed at Coal-dale on the C.P.R. farm there averaged 954 lbs. One calf weighed over 1,200 lbs., and two others over 1,100 lbs. each. These are remarkable weights for cattle of that age, and show what can be done by good feeding.

These finished calves were the favourite cattle on the British market at that time of the year. Already the Southern Alberta Co-operative have received several letters and cables from the Old Country buyers inquiring about what shipments are going forward for this coming season.

For the present season the contract with the feeders has been changed, and now the feeder does not depend on how much the cattle sell for to get his profit. The new contract is a straight 6c per lb. paid for all gain put on the cattle given out to the feeder.

I attended a few meetings a year ago at High River, and as a result of the activities of the board of trade there, a branch of the Red Label feeding scheme has been started at that point. A number of feeders put in applications, and have 400 head of cattle on feed now.

With the bad state of the market last fall some of the ranchers were not anxious to put out many cattle, but preferred to hold back as many of the younger class on their ranches as possible.

The ranchers putting out cattle to feed now are W. H. McIntyre, George Ross, A. E. Cross, Jackman & Taylor of Macleod, and Gilchrist Bros. of Manyberries.

With the low prices and the poor demand for cattle last fall, the ranchers had difficulty in selling their two-year-old steers, with the result that we took more of that class of cattle to finish with grain than usual. Most of these two-year-olds came from Gilchrist Bros., and were placed in the High River district. So far this season, the weather has been very favourable, and the cattle have done extra well up to now.

The majority of the cattle are being fed on the self-feeder basis, and are making good gains right along.

More interest is being taken in this feeding scheme every year, and I have had to answer hundreds of inquiries from all over the west in connection with this work.

This season there has also been an extension of the scheme to Lacombe district, and there are about 500 cattle being fed on the same plan as in the Lethbridge district. These cattle mostly came from the McIntyre Ranch, and are composed of weaned calves and yearling steers. S. Henderson is supervisor at Lacombe in connection with this work. I expect to see quite an extension in this scheme of finishing cattle in the next year or two at different points in the Province.

I look for quite an increase also in the next year or so in the Raymond area. About 2,000 acres of land was sown to alfalfa last spring, which means quite an increase in the hay crop for the next few years in that district. Unless some new outlet is found to

market this hay, the only source is to feed it to cattle in the district. This means a large increase in the number of cattle which may be required there next spring.

This is the fourth season for this feeding scheme, and up to now it has worked out very successfully. We have been fortunate in having cattle of a high standard of quality to feed. These cattle when finished have always commanded a premium in both Canada and British markets, and with care in selecting the cattle put out to feed, and also in the shipments to Great Britain, I think there is quite a future for the marketing of our fat cattle in this way rather than off the grass in the fall months, when the price is usually low both in Canada and Great Britain.

Short courses were held in Lethbridge and Raymond in February. At these courses I addressed the gathering on beef cattle and the finishing and marketing of same. I also attended three meetings at High River, where I spoke on the same subject.

I also arranged a field day in the Lethbridge area in March, and had a large turnout of farmers and other interested parties. There were about 40 from High River. After inspection of feed lots and cattle, a meeting was held and feeding arrangements explained. Many questions were discussed.

Another visit to the feed lots was made about the end of May, when the Western Stock Growers held their annual meeting in Lethbridge, and all those who visited the yards expressed their appreciation of the work being carried out in this district.

Report of the District Agriculturists

LETHBRIDGE DISTRICT

(M. L. FENG)

The crop outlook was not very encouraging in the spring of 1932, due to the lack of reserve moisture. During the spring months all the south-western part of the Province was favoured with rather cold but showery weather throughout April, May and the first half of June. Crop and range conditions were excellent up to the 1st of July. There was scarcely any rainfall during July, August and September, and coupled with the extremely hot weather, the maturing of the grain was considerably hastened, and the consequent yield was greatly reduced, especially in the dry farming areas. However, the general crop yield throughout the Lethbridge area was about average.

In the Lethbridge district, or the south-western part of the Province, climatic conditions, especially in rainfall, vary a great deal. For instance, there is a large variation in the Bow Island, Claresholm, Foothill and irrigation districts. All these districts present varied difficulties and advantages. This office has endeavoured to assist in working out cultural methods and crops best adapted to the various conditions. Throughout our wheat-growing areas a system of summerfallowing is necessary, but this, combined with drought and high winds, makes soil drifting a very serious problem. Control methods naturally vary, depending on locality, soil type and moisture conditions. Generally, under our conditions, strip farming has proved the most effective control method, and this practice has become general throughout our worst soil-drifting areas.

The inclusion of grasses in a regular rotation to bind and add fibre to the soil has not proved satisfactory under dry conditions, owing to the uncertainty of securing a stand and the comparatively low yield of fodder. However, with proper preparation, brome grass, sweet clover and corn fodder can successfully be grown throughout most of these districts, at least sufficient to maintain a moderate number of live stock.

Owing to the extreme drought conditions of the dry farming districts throughout 1931, it was necessary to issue considerable feed and seed grain during the spring of 1932.

The grasshopper outbreak covered a much greater area than was at first anticipated. Grasshopper mixing stations were operated for a considerable length of time at Carmangay, Pearce, Coal-dale, Taber, Cameron Ranch and Picture Butte. There was some damage done to crops, but not of a serious nature. However, the grasshoppers became very numerous by fall, and it is feared there will be serious infestation during 1933.

There was also a noutbreak of the beet webworm in some of the sugar beet districts. However, prompt action in spraying prevented any serious damage.

Considerable progress has been made throughout the irrigated districts in developing along mixed farming lines, but with the discouragingly low prices of all farm produce the average farmer's returns for 1932 will not pay due to their present high overhead cost.

This office has assisted in locating and inspecting several bulls, boars, rams and breeding stock for this district. Efforts are directed to improve quality instead of quantity.

Beef and lamb feeding was carried on throughout the irrigated districts on a fairly large scale. Feeders were generally successful in turning out a highly finished product, but beef and lamb prices were low, and the best they could realize was a fair market price on their feeds.

Interest continues amongst the juniors in the various clubs. The Lethbridge District Wheat Club, with 20 members, secured first generation Marquis seed wheat, and this club carried on very successfully. They have a quantity of excellent seed for distribution throughout the district.

The Lethbridge District Corn Club has 14 members, who made an excellent showing. They received instructions in proper preparation of seed beds, methods of planting, cultivation, selecting and curing of seed corn. Corn should be included in the cropping plan on every irrigated farm. Besides acting as a cleaning crop, it supplies excellent fodder as well as matured corn. I have in mind one farmer in this district who had a yield of 80 bushels of shelled corn per acre on a two-acre plot.

SUGAR BEET CLUB.

The 15-ton Sugar Beet Club, which is sponsored by the Lethbridge Herald, Canadian Sugar Factory, Ltd., Alberta Beet Growers Association, and the Department of Agriculture, as in previous years, held a very successful competition. This club has served to stimulate keener interest in better cultural methods, the value of rotation and the use of fertilizers. The average district tonnage yield has been increased from seven tons per acre to better than 10 tons per acre for 1932. There were 50 members, and 26 of them grew over 15 tons per acre on a 5-acre plot. Mr. N. J. Anderson, of Barnwell, was the champion grower for 1932 with 21.91 tons per acre. The operations of the sugar factory have meant a great deal to the farmers growing sugar beets, but it has also benefited directly or indirectly the whole community. The factory this winter completed the longest run in its history. There were 714 growers, who planted 14,000 acres, which produced a total of 150,731 tons of beets, and the yield was about 455,000 bags of sugar, weighing 100 lbs. each. It is estimated that the factory paid out \$1,500,000 in connection with production of this sugar, which has gone directly into circulation.

The Baby Beef Calf Club held its ninth annual calf feeding competition at the summer fair, with an entry of 22 splendid type

uniform calves. After judging, these animals were auctioned off to the highest bidder, and the champion calf, as in previous years, went to T. Eaton Co. at a price of 25c per lb. The balance of the calves sold comparatively well considering the low price for beef at that time. Again, the quality of these calves showed a splendid finish, being remarkably uniform throughout. The sale and the judging attracted keen interest at the fair.

In the Dairy Calf Club section we have a Holstein and Ayrshire Club. There was a total of about 70 animals exhibited at the fair, comprising junior calves, yearling and two-year-old heifers. The yearling animals were shown as calves in former years, and cared for by the club members until they have passed their first lactation period. Many of these two-year-old heifers were entered in the two-day milking competition at the fair, and some have produced as high as 11,000 lbs. of milk during the first lactation period.

The club members had approximately 100 head of cattle at the Lethbridge Fair this season, and it was expressed by a great many of the visitors that it was the best part of the fair.

The members standing at the top of the list in their various sections were as follows:

Henry Klassen, St. Kilda, champion Hereford calf in the Baby Beef Club.

Shirley Dalgleish, Iron Springs, champion Holstein.

Mae Ober, Picture Butte, champion Ayrshire calf.

Shirley Dalgleish, Iron Springs, champion yearling heifer, Holstein.

Allan Johnson, Picture Butte, champion yearling Ayrshire heifer.

Ernest Snowden, Lethbridge, first in the two-year-old Holstein section.

Vaughan Giffen, Lethbridge, first in the two-year-old Ayrshire section.

The operation of the club in this district has undoubtedly created a greater appreciation of the dairy industry in the development of high-class dairy cattle generally.

Some work has been done in the various irrigation districts in growing small plots of various varieties of vegetables to interest canning companies. They admit that the quality and quantity that can be grown in these irrigated districts is very satisfactory, but they do not see their way clear to give us factories for this purpose at the present time on account of financial conditions. However, the United Irrigation Project have had a contract with a canning company to produce canning pea seed. This has met with fairly good success, both from the standpoint of quality and quantity. If there was sufficient market, no doubt there would be an increase in the production of seed peas.

We have had numerous requests for assistance in planning irrigated farms as to layout for rotations and also in the matter of layouts of home grounds for trees and home beautification.

The writer has acted on the Parks Board Committee, and may say that, with volunteer help, there have been about 15 acres pre-

pared and planted to trees at Park Lake, north of Coalhurst. The park is located in the centre of the Lethbridge Northern irrigation district, and will serve as a playground for a large community.

There have been several excursions in connection with sugar beet work and cattle feeding, with a very good attendance.

We have had field days and demonstration work for the junior club members.

A very successful seed fair was held at Lethbridge this fall. The local junior grain club and corn club members exhibited their grain at this point.

A two-day short course was held at Lethbridge Experimental Farm, and another one at the Raymond Agricultural School. We had very good attendance at these courses.

We have also attended a great many farm meetings throughout the year, and our office correspondence has increased considerably over previous years.

HANNA DISTRICT

(E. G. Wood)

Generally speaking, farming conditions in this district received a much-needed tonic in 1932. Moisture was more plentiful, and less damage to crops due to hail and high winds was experienced than in the year previous, when the wheat crop could be considered next to an absolute failure. At one stage in the growing season there was every evidence of a high yielding crop, but during the latter part of the season hot winds combined with lack of rainfall reduced the estimated yield by 30 and in some cases 40 per cent. Even with this drastic reduction, the results at threshing time was quite gratifying, and had the price of this particular commodity been anything like normal, the farmers would have been in fair financial circumstances. However, with the combination of comparatively low yields and exceptionally low price for wheat, little was left for the farmer after paying operating expenses. The western portion of the district, including Craigmyle, Delia, Michichi, Morrin and Munson received greater rainfall and a more favourable report can be given as wheat yields of 35 and 40 bushels were not unusual. In the district situated south and south-east of Hanna, and extending to the Red Deer River, a radical change has taken place within the past two years. Numerous farmers, after farming in this district for the past 15 to 20 years, have abandoned their farms and moved to new locations within the Province where agricultural conditions were somewhat more favourable. Large unsettled areas once devoted to wheat growing are now only a sea of weeds, giving the district a very desolate and unattractive appearance. It is possible, however, these unsettled areas will in the future be utilized for grazing purposes, as time has demonstrated the fact very clearly that wheat cannot be grown profitably.

Owing to the extremely poor crop season of 1931 an acute shortage of feed for live stock was experienced in the winter of 1931-32. Early in the winter of 1931 the Government Feed Loan Policy and the special railway tariff on feed came into effect. With this

assistance rendered, it was possible for the farmers to purchase feed outside the district, and in this way were able to carry their stock through the winter with a minimum of loss. The purchasing of the feed, securing of chattel mortgages on live stock as required under the Feed Loan Policy and all other details in connection with the policy were handled through this office. Altogether, approximately 500 car-loads of long feed and 100,000 bushels of feed oats were handled in this manner. The Fodder Relief Policy practically demanded full time work until the middle of May.

Little interest in the purchasing of registered seed grain was taken by the farmers of this district during the past spring. This was due, no doubt, to the inability on the part of the farmer to finance the purchase and also to the fact that the district has been well supplied with high quality seed during the past few years. However, a quantity of brome and sweet clover seed was secured through this office for a number of farmers. Assistance was also given in the way of obtaining applications for seed distributed by the Dominion Seed Branch under the Forage Crop Seed Distribution Policy, and some 16 plots were seeded to grasses and clovers under this arrangement. These plots were inspected during the month of October, and the greater percentage gave evidence of good results. In a few cases less satisfactory results were obtained, but these partial failures could be attributed to lack of preparation of the soil previous to seeding or to too deep seeding. There is a growing interest taken in the seeding down of cultivated land to grasses. It is evident that some work of this nature is necessary in order to combat the soil-drifting problem and at the same time provide pasture, and more especially the supplying of winter feed for stock. Brome grass is now being grown quite extensively in some parts of the district, and a large amount of brome seed was threshed this past season.

During the spring of 1932 petitions were received requesting the Government to give assistance in the transportation of settlers' effects for farmers wishing to move from the dry area to other parts of the Province. This concession was granted, the applicant being required to pay one-third of the regular freight charge. Under this policy 30 farmers filed their applications at this office, and the one-third freight charge was collected and remittance made to the Department of Agriculture, Edmonton. Information was also given on available homestead lands, homestead regulations and the transportation policy.

Sheep raising being an important branch of farm operations as carried on in the Hanna district, considerable time and assistance was devoted along this line. Being secretary of the Eastern Alberta Wool Growers' Association brings the agriculturist in close contact with the various sheepmen, thus making it possible to render valuable service. The association, which handles around 90 per cent. of the total wool clip of the district, was able to assemble four car-loads, or a total of 93,000 pounds. The wool was shipped to Weston, Ont., and sold through the Canadian Co-operative Wool Growers, Ltd. The result of the sale proved quite satisfactory in comparison to receipts of sales made outside the association, netting one to two cents more per pound to the grower.

The quality of the 1932 clip was much superior to the 1931 clip in that the wool was brighter, containing less foreign matter and naturally bringing a better grade on the market. Outside of the assembling of wool, mailing out statements and cheques, the association handled a large quantity of sheep supplies such as sacks, twine, dip, etc.

Two Suffolk ram clubs were organized under the Dominion Ram Purchase policy, and 38 pure-bred rams were brought into the district. These rams, in many cases, replaced grades, and should go a long way in improving the quality of sheep kept on the farm. This makes a total of 56 Suffolk rams purchased by farmers within the past two years through the Dominion Ram Club policy. Assistance was also given in the placing of sheep out on shares, the purchasing of pure-bred female breeding stock, the interchanging of rams, and the disposing of lambs for market and feeding purposes. Sale was also secured for 175 head of grade breeding ewes to the Dominion Agricultural Credit Company, Regina.

Two junior sheep clubs were given assistance through this office. Owing to the low price of sheep and wool, these clubs have not increased in membership to any extent during the past year, but the size of flocks owned by members have increased materially. One club was disbanded, as many of the members had moved out of the district, while others became over age for club work.

Junior seed clubs were organized at Oyen and Youngstown. These clubs experienced a fairly successful year, obtaining a much better yield from their plots than in 1931. Grain judging competitions were carried on with both clubs with the idea of selecting a judging team to represent the Province at the Toronto Royal. The boys, however, were unable to obtain a sufficient score to qualify for the team. These junior grain clubs have been instrumental in improving the quality of grain grown in the district in which the clubs are located. This improvement has been brought about through the distribution of seed produced from the registered seed plots during the past three years.

Live stock work, apart from sheep, was confined largely to the purchasing of sires or assisting groups of farmers to obtain bulls under the Federal Bull Loaning policy. A number of good sires of the Red Poll, Angus and Shorthorn breeds have been secured for the district in this manner, and no doubt will be an asset in improving the quality of commercial stock. There is also a growing demand for a further assistance along this line, as many farmers feel they cannot afford to pay high prices for pure-bred sires, especially when only a limited number of breeding females are retained on the farm.

Conditions generally throughout this district have affected this office in such a way as to make it almost impossible to carry on promotion work to any large extent. During the past year a great percentage of the agriculturist's time was devoted to work of a relief nature.

SEDGEWICK DISTRICT

(H. W. Scott)

In the "Forage Crop Improvement" work carried on in this area in 1932, 48 farmers secured sufficient seed to sow 592 acres, made up of 206 acres of alfalfa, 82 acres of sweet clover, 138 acres of brome grass, and 166 acres of western rye grass. We were successful in having these crops spread over a rather wide area, and the stands generally are satisfactory in spite of the dry summer and fall. Of the 81 alfalfa fields seeded by junior club members in 1931, 66 fields produced a satisfactory crop in 1932, while 15 fields were unsatisfactory. This was the first serious attempt made to introduce alfalfa under supervision, and the results were quite encouraging. The failures can be attributed to soil drifting, seeding too deeply, encroachment of grass and weeds, and not permitting a sufficient growth in the fall to establish strength and vigour in the root system. This year 50 more fields were seeded by juniors, and all but five give promise of being well established, though the growth was rather short owing to lack of moisture during the latter part of the growing season.

A total of 198 junior farmers were engaged in organized club work of some kind during the year in this district. The clubs included projects in wheat, oats, alfalfa, calves, swine and lambs. Meetings, judging classes, tours and contests were held in connection with these organizations. The work, we believe, has interested the members in market requirements and high quality production. The element of competition has stimulated effort. Through the efforts of the 48 wheat club members at least 7,000 bushels of good seed will be available for seeding in 1933, and the 34 oat club members will have from 3,000 to 4,000 bushels of good Victory seed oats.

School fair activities were supervised at ten centres, and it is pleasing to note the continued interest and enthusiasm in these undertakings. The quality of the exhibits, together with the keenness of the pupils in exhibiting their best work, indicates a continuity of effort throughout the year and from year to year. Points and medals are being substituted for cash prizes in the sport events. The Czar School Fair Association has added to its programme for the year the sponsoring of a contest between schools of a one-act play.

A considerable quantity of wheat and oats was seeded throughout the district with the idea of getting satisfactory samples for the Regina Exhibition next summer, but the weather was such that while the colour is excellent, very few samples, if any, will be up to the standard required for this exhibition.

Working through the agricultural societies at Sedgewick and Provost, two field days were held early in August, one at the farm of Mr. Chas. Ball, Sedgewick, where upwards of 600 people were present, and the other at the farm of Mr. M. Watson, of Provost, where there were at least 250 present. These field days, held at this season of the year, just before harvest, give the visitors an opportunity to inspect the crops and hear informative and inspiring addresses on timely subjects by representatives of the Department

of Agriculture and the University of Alberta. The thoughtfulness and generosity of these hosts went a long way towards making these events so successful. Both grow registered seed. Mr. Ball grows certified seed potatoes, alfalfa, and has some high-class live stock and poultry. Mr. Watson had rather extensive experiments with ammonium phosphate and superphosphate on a wide variety of crops under various cultural practices. Neighbouring farmers at both places brought additional stock for demonstration purposes.

The members of the Accredited Flocks Associations in this district has grown considerably during the year. The opportunity offered, through these associations, to improve the breeding stock on the farm and to grade and market eggs and poultry as a group is being recognized. Through the continued blood-testing of flocks and sanitation, Pullorum disease has been practically stamped out. At Easter time the Sedgewick and Daysland associations staged in Edmonton a very attractive display of stamped and graded eggs. This display had the effect of drawing to the attention of the consuming public in the city the quality of the product being offered for sale by these associations. This office co-operated with the Department of Agriculture and the Poultry Pool in arranging poultry killing demonstrations from Provost to Amisk when it was realized late in the fall that the market for live poultry was not promising. The interest and attendance was better than anticipated. At Czar two outstanding flocks of turkeys in the hands of Miss Elsie Rochards and Mrs. Frank Houcher have brought honour to these breeders by their winning at the Toronto Royal for the past two years and at the leading poultry shows in Alberta and Saskatchewan. There is increased interest in breeding good turkeys, and quite a number of flocks have been improved by birds from these and other flocks.

Parasites in hogs, sheep and poultry are common in some feeding yards and pens that have been in use for some time, and this office has given considerable attention to this trouble by suggesting better sanitation, approved worm expellers and better feeding practices. There is a good deal of evidence of lack of minerals in the common rations for live stock. As the amount of alfalfa available for feeding increases, this trouble may be largely overcome, but in the meantime the feeding of bone meal, ground rock and potassium iodide are proving decidedly beneficial. Blackleg has also appeared among herds that have not been vaccinated. The lack of cash has had something to do with the carelessness in respect to vaccination.

The low price of cereal grain has given an added stimulus to the finishing of beef cattle, not only among juniors, but seniors as well. We have been successful in bringing one of the ranchers in the eastern part of this area in contact with feeders in the Sedgewick district, with the result that a small beginning has been made in finishing calves and yearlings, somewhat along the lines of the Red Label organization in the Lethbridge district. We have also co-operated with the Alberta Provincial Sheep Breeders' Association, through Miss Holmes, in assembling and shipping wool direct to Weston, loading taking place at Provost and Sedgewick. A con-

siderable quantity of this wool was directed to be manufactured for home use.

Some of the newer types of farm machinery have been watched rather closely during the season, and my observations have already been reported. Provincial and Dominion Government Sire Purchase and Loan policies have received attention, and the assistance given to breeders under these policies has made it possible for them to secure much better sires than they could do otherwise.

Under present conditions the services of the District Agriculturist is much in demand in a great variety of ways, and we appreciate the opportunity to serve.

VEGREVILLE DISTRICT

(F. H. NEWCOMBE)

In spite of some unfavourable weather conditions the season of 1932 was a successful one for crop production in this district. Abundant winter snow and early spring rains provided satisfactory moisture supply, and the seed went into a good seed bed, although somewhat late. Seeding was general during the end of April, although some cultivation was accomplished before that time. Sloughs were full of water for the first time since this office was opened. Seeding proceeded without interruption, and was about completed by the end of May.

For the first time in several years horses were used almost exclusively instead of tractors. The land in the spring was too wet for tractor-power, and while feed grains were plentiful, cash for tractor fuel was rather scarce.

While prices for live stock products have continued their downward course, the index number is probably not quite so low as for grain, and the result is seen in a somewhat greater interest in live stock production. There are those who, being governed by today's prices only and unwilling to assume the effort required for live stock production, are making no move in that direction. At the same time it is safe to say that throughout this district there is a greater interest in live stock generally. There has been a fair demand for pure-bred sires of all classes. Three Shorthorn bulls have been placed in the district under the Dominion loaning policy, while six Shorthorns were secured under the Sire Purchase policy. At the Edmonton bull sale, 35 Shorthorns were contributed from this territory, all of which were sold, and nine bulls were bought at the sale by farmers in this district. The greatest activity, however, in this line has been by private purchase, and we have been instrumental in exchanging or purchasing 12 or 15 bulls. There is very little, if any, request for sires of dairy breeds, and some farmers who have been using them are returning to Shorthorns.

As might be expected hog production has declined somewhat in this district following the rather abnormal increase which occurred in 1931. There seems to be a general opinion that the present prices of hogs does not warrant their production, and breedings for next spring farrowing will probable from from 25% to 40% lower. Those

who specialize to some extent in pigs are, however, maintaining their usual supply. While the demand for boars was somewhat lighter, the standard of quality was somewhat higher, and we have been able to assist in the placing of some 20 boars and 30 sows by private purchase. The Yorkshire breed remains the most popular, and several farmers have secured pure-bred sows with our assistance.

There was very little cattle feeding carried on this year in this district. Most farmers, while they have plenty of feed, have not the cash to purchase the cattle. Those who have their own cattle are feeding them through for spring markets. We have made a particular effort to have these feeders adopt the most approved methods, and most of those who have any appreciable number of cattle are doing so. Self-feeding of grain, particularly of calves, has been recommended, and is being practised more extensively.

The growth of the sheep industry in the district is slow but steady. We know of no cases where sheep have been discontinued, and we have been instrumental in assisting six farmers to begin with sheep in a small way. A Suffolk Ram Club was organized at Vegreville, and some 16 rams were distributed to 12 men. Assistance was given to members of the Ryley Ram Club in the matter of castration and docking. The Burdizzo was used as a demonstration, and appears to have considerable value, particularly in fly time.

Horse breeding, which has been more or less at a standstill for years, will apparently be revived. Numerous requests have been received for assistance in placing good stallions in this district, and this will receive attention early in the New Year.

No extensive organized poultry work has been attempted during the year. Considerable culling and mating has been done, and there is evidence of increased interest in poultry. The time would appear to be opportune for the revival of organized poultry work.

Grass crops came through in good condition, and gave a satisfactory yield of hay or seed, as the case might be. Grass seed production is being extended somewhat, attention being given by this office to the distribution policy of the Dominion Government. Brome and Western Rye are most popular, and enough of these seeds are being produced in the district for local demand.

Fifteen carloads of seed grains were shipped out of this district in car-lots to the southern part of the Province. This was principally oats and barley, and most of it was shipped under the relief policy.

The portable grain cleaner continues to be operated by the Department and Vegreville Exhibition Association. It was well patronized during the year by farmers for their own seed as well as the relief seed shipped out. We have found it necessary to give this activity close supervision. The total of 55,000 bushels was the same as last year, and represents an average of 85 bushels per hour, at a cost to the farmer of \$1.25 per hour. We have also done some commercial cleaning with this machine, resulting in a raising of the commercial grain to a higher grade. Financial resources of the farmers will, no doubt, limit the demand for this work in the

coming year. We feel that the work of the cleaner is a valuable factor in weed control and in raising the standard of seed grain. Weeds continue to increase in the district, and we have tried to point out the most approved methods of control. Stink weed is becoming quite prevalent, and wild oats are certainly a major problem.

Junior clubs are apparently becoming more popular, and we have found it necessary to devote quite a large part of the season to this work. Grain clubs in wheat and oats were conducted at Vegreville and a barley club at Ryley. Second year alfalfa clubs were in operation at Vegreville and Viking. The interest in these clubs was good, although the results obtained still leave something to be desired.

Swine clubs were operated at Tofield, Ryley, Holden and Viking. The Vegreville club was allowed to lapse for this year, but will probably be resumed next year on the sow and litter basis. Ryley and Viking clubs were newly organized, while Tofield and Holden were in their second year. We were fortunate in securing exceptionally good pigs for the new clubs, and the results were very good. Two carloads of pigs were marketed by these four clubs. We have found it necessary to give these clubs considerable attention, and as they are located some distance from Vegreville, considerable travelling has been necessary. We feel that the effort will be warranted by the results, since the quality of the pigs in this district was rather low. Feeder pigs were purchased in the spring at \$1.50 each and registered sows at \$5.00. The pigs marketed were sold on a basis of \$2.85 per cwt. f.o.b. shipping point, and were shipped east. The uniformity of finish was exceptional, only three lights being brought in at the four clubs, and even these were well fleshed. The average weight of the 190 pigs marketed was exactly 200 lbs. The attendance at the swine club fairs was good and interest in the districts was keen.

Closely linked up with the junior swine clubs is the distribution of pure-bred boars, of which we have 28 under the Dominion Sire Loan Policy. As a result, some 700 to 800 sows are being mated with high-class males. Nearly all of the new boars required this season were secured from members of junior swine clubs, at prices from \$12 to \$20 each.

A beginning has been made in the organization of cattle feeding clubs. Ten boys were enrolled in the Tofield district, and each one is fattening two calves. Since money was scarce for the purchase of calves, we have endeavoured to use those already on the farm, with the exception of three boys for whom calves were secured locally and at the Edmonton yards. We hope that will be only the beginning of a popular winter activity among junior farmers. Calves secured are of good quality, and should be in good condition by next spring. Self-feeding of grain is being practised.

The only school fairs supervised by this office were those at Vegreville and Ryley. The entries were fully up to previous records and the fairs quite satisfactory, though prize lists have been reduced in keeping with the times. Short courses of one day each were held at Tofield and Viking, where very satisfactory attendances were recorded.

Statistics of the season's activities show that we have made a total of 1,834 visits since the 14th of March, or an average of 45 per week.

WILLINGDON DISTRICT

(WILLIAM N. PIDRUCHNEY)

The season of 1932 was not as satisfactory from a crop standpoint as the two past seasons. The spring opened rather late, which delayed the seeding operations considerably. Wheat seeding began towards the last week in May. The area sown to wheat, therefore, was considerably reduced, which left a larger acreage to coarse grains, and more land was summerfallowed than planned for. Moisture conditions were favourable from the start, but the cool weather, however, during the early growing season delayed the growth. This condition was immensely improved towards the end of June, but there was still some apprehension as to whether the crops would mature in time to escape the fall frosts. About the third week in July several scorching days did a great deal of harm, and where 40 to 50 bushels to the acre were expected the yield was reduced to run from 20 to 30 bushels. The coarse grains were affected even to a greater extent, which reduced the stand and yield accordingly.

With the lower trend of prices for farm products, there has been a decided stimulus towards the improvement of quality in live stock. Hardly a week passes without someone inquiring how and where a pure-bred bull can be obtained. If the same interest had been exhibited several years ago, when the prices were better, this district today would boast of as high a quality as anywhere in the Province. In meeting these requests the live stock improvement centres have been organized in many localities in conformation with the rules of the Federal Sire Loaning Policy. Only a limited number of these centres were fortunate in receiving the bulls this year, and others either took advantage of the Provincial Purchase Policy or will be taking advantage of it at the bull sale next spring. The most unfortunate part in meeting the demands for the well-bred bulls is that there are none or very few that may be secured locally. There was very little effort made by any individual farmer to develop a herd which would supply well-bred bulls for the local demand, at least.

This situation was brought to the attention of several farmers in the past year, and as a result a Pure-bred Shorthorn Heifer Club of 15 members was organized last summer. This lot of calves was selected from some of the best herds in the Province, and now with the use of some very well-bred bulls supplied under the Federal and Provincial schemes, there is reason to believe that a very sound step was undertaken. The prize money in the sum of \$250, won by the M.D. of Eagle in the Community Progress Competition, was made available for this purpose, and with an additional prize of the same amount which the municipality won again this year, the project will be enlarged upon the following year to cover a larger territory. These calves were exhibited by the members at the local school fair,

and there was no question in one's mind that it was the best lot of calves ever seen in this district.

With the price of fuel for tractors hovering around the same mark as of several years ago, many farmers are forced to turn again to horses. More colts are being raised, and the demand for good stallions is increasing. Since it is difficult in these times for any one farmer to purchase a good stallion, other methods are being utilized to make stallions available. The Federal Horse Policy as one method was talked about by several communities, but only one club was organized under that policy, and that is in the district of Shandro. There were in the neighbourhood of a hundred mares signed for, and to all appearances the men are well satisfied with the results so far. The club was exceptionally fortunate in securing the services of the University stallion "Barnett," which is an outstanding Percheron horse in the Province.

The interest in swine production has been dampened somewhat in general, but only to the extent of reducing the number of sows bred. The quality, however, is being recognized more than ever, and it is a matter of past history to find a man who would be satisfied to have his sows bred to just an ordinary boar.

The results of swine club activities during the past several years are appreciated now more than ever. It is a very common occurrence to find men whose market hogs grade from 50% to 75% selects, which is quite an item when the returns are tabulated even at these low prices. And the most gratifying feature of such a situation is the knowledge that in most of these cases the herds are traced back to the activities of the swine club work in the districts.

The three swine clubs at Willingdon, Andrew and Mundare were under the supervision of this office as in former years. The membership has declined slightly in each of them, but this is to be expected in the older clubs. The Mundare club did not go through with all of the activities, but the Willingdon and Andrew clubs carried out the full programme. Since it was found difficult to secure enough pigs of the same size for club shipment from Willingdon and Andrew clubs separately, a combined shipment of 102 hogs was made. The quality of the pigs exhibited and marketed was exceptionally high. The Federal Sire Loaning Policy is greatly appreciated, and it is doubtful whether the success of the swine clubs would be as noticeable without this service. At present there are 30 boars loaned out to the three clubs under this policy.

During the year the crop improvement programme was continued mostly along the lines of junior grain clubs. These have covered a large territory, and are highly suitable for the introduction of pure seed into the districts. There is no other factor which is more applicable to these districts for crop improvement purposes. The three wheat clubs at Willingdon, Andrew and Hairy Hill had a total membership of 60. The two oat clubs at Andrew and Willingdon were organized, but only the latter functioned with 30 members, as it was impossible to secure good seed for the other one. A barley club was organized, with Willingdon as the centre, with 13 members. Two alfalfa clubs had a membership of 54. In the spring of 1931 the first alfalfa club was organized with the

purpose of getting some reliable information on its adaptability for this district. It may still be a little too early to make any definite conclusions, but during its two years of growth it certainly has done exceptionally well. If it should continue to give similar results in the following years it will be an established factor in the forage crop programme of the district. With the assistance of the men from the Field Crops Branch, several field and achievement days were held in connection with the grain clubs, which were greatly appreciated by the members, as much very valuable information was given out to them.

Since the raising of cattle is receiving a greater recognition as a necessary adjunct in the scheme of stabilized farm income, and since quality is coming to be recognized as an absolutely necessary factor for larger returns for market cattle, the attention is diverted more than ever towards the hay and pasture crops. This phase of farming is being steadily enlarged upon, and now many farms have sufficient pasture land for the cattle to replace the old "exercise grounds." The Federal Forage Crop policy of last year has been taken advantage of by 19 farmers from this territory, who have sown from 10 to 20 acres to various forage crops. This will assist very materially in the production of seed eventually for the local demand, at least.

The general weed situation, although not very acute as yet, is gaining a larger hold on the district, especially the perennial sow thistle. No efforts, however, are spared either from this office or the municipalities to acquaint the farmers with the most effective methods of its control. Stinkweed is gaining ground steadily in some localities, but very strict measures are being adopted to keep it in check.

Assistance was being rendered as in former years with the school fair work. A new school fair was organized at Andrew, which was held in the fall with a fair success. The Willingdon fair was a little smaller, owing to a few schools dropping out at the last moment on account of the hail which visited those districts. Hairy Hill fair was cancelled this year, but efforts are being made to have it renewed for the coming year. Assistance was also rendered with the judging at Landonville, Bonnyville, St. Paul and Ashmont school fairs.

Agricultural short courses were organized and held at Smoky Lake and Spedden. The interest at the former was not very keen, but at Spedden a couple of interesting days were spent. An opportunity to discuss the various farm problems was readily accepted and very much appreciated by the more progressive farmers.

Twenty-seven single meetings were held, when subjects of agricultural interest were discussed. This does not include the meetings of the junior clubs and the school fairs, of which there were about twenty, and which are attended very often by adults.

A very successful Ayrshire field day was organized and held at Hairy Hill. There were about 75 present, who spent a very interesting afternoon in discussing the dairy problems with Messrs. Carlyle, Boden and Slater. This district has several small Ayrshire

breeders who are very keen in the promotion of the dairy class of cattle.

The interest in the Community Progress Competition sponsored by the C.N.R. is very keen in the three municipalities of Eagle, Pines and Wostok. This office is called upon very frequently to give advice and assistance in this competition. The M.D. of Eagle was again successful in winning the third prize of \$250, and the municipalities were highly commended for the progress they had made.

Another very important feature of this office is the preparation and the training of the various club teams for the semi-final and the final judging contests. There were six teams trained this year, three in grain clubs, of which the elimination contest was held at Willingdon. The Willingdon team, composed of Geo. Schewchuk and Geo. Fediuk, won this competition, which later won the Provincial finals, and represented the Province at the Royal Winter Fair. The two swine club teams competed in the Provincial finals, where the Willingdon team stood third and the Andrew team eighth. The calf club team stood third in the Provincial finals.

MYRNAM DISTRICT

(A. J. CHARNETSKI)

The spring of 1932 was very late. Seeding was not general until May 5th. The greater part of May and the first half of June were dry, and seeding operations were practically uninterrupted. Grain came up uneven and made rather slow growth. Wireworms appeared on higher parts of the different fields. Fortunately, a good rain on June 16th checked their activities, consequently the damage was not general nor very serious. Rain was plentiful until the latter part of July. On July 23rd a severe hailstorm swept over this district and seriously damaged the crops over an area of two miles wide by about 10 miles long; then came a period of dry weather. This hastened the ripening of grain, and brought it to maturity rather earlier than usual for this district.

Due to abnormally low wheat prices, many farmers are contemplating a reduction of their wheat acreage, substituting it with forage crops. Shortage of pasture and hay, together with demonstrations that tame grasses and legumes are very well suited to this district, caused many farmers to consider very seriously the use of forage crops for both hay and pasture. This was indicated by the number of orders sent through this office for alfalfa, western rye and brome grass seed. The Dominion Forage Crops Policy and the assistance of our Field Crops Branch in this connection is greatly appreciated by the farmers in this district. Information as to when and how to sow alfalfa, brome, and western rye grass had a great deal to do in helping the farmers to establish good stands of the forage crops in question.

One alfalfa club was organized last spring. There were 14 members and not a single failure in establishing a good stand of alfalfa. This club was instrumental in creating a greater interest in legumes among the farmers in the district. For example, a

small patch of alfalfa which was established in 1931 was cut four times during the growing season of 1932; although this may be an exception, due to the fact that it was seeded on an old garden plot, yet there is ample evidence that two good cuttings of alfalfa is not unusual on poor worn-out soil.

Three junior grain clubs were organized last spring: a Reward wheat club at Myrnam, Victory oat club at Myrnam, and Marquis wheat club at Slawa. The three clubs had a total of 85 members. The results of these clubs were most encouraging. It is one very effective way in improving and standardizing the quality of grain in any district. Yields in all cases were above the average, especially so in the case of Marquis wheat and Victory oats; Marquis wheat yielded up to 52 bushels per acre, or 18 bushels per acre more than did the home-grown seed of unknown origin on identically the same kind of soil. Victory oats yielded as high as 116 bushels per acre.

A well-attended field day of all junior grain clubs was held in August. An exceedingly interesting lecture on the varieties of cereal grain, and the method of distinguishing the different varieties was given by Dr. O. S. Aamodt, of Alberta University. Mr. E. H. Buckingham, Assistant Field Crops Commissioner, gave an interesting talk on weeds; also he conducted a judging competition.

A junior seed fair was held in Myrnam on December 3rd. The different clubs were well represented. Most of the exhibits were of high quality and carefully prepared. Four boys were sent to the Alberta Seed Fair, Edmonton, to represent their respective clubs. Wm. Sawchuk, representing Slawa club, was high enough, in judging at the fair in question, to be one of the competitors for a trip to the World's Exhibition and Conference at Regina.

This office was responsible for the judging of junior field and forage crops at the following points: Oats at Islay, alfalfa at Vermillion, Sedgewick and Daysland.

Weeds are gradually becoming more prevalent in this district. The seriousness of such perennials as Sow Thistle, Canada Thistle and Couch Grass is realized only by few. This office is continually disseminating information on the control and the eradication of noxious weeds.

Most of the cattle came through the winter in poor condition. This was due in many cases to poor feed and inadequate shelter. It is hoped that the feeding of calves for baby beef and the finishing of a few yearlings will in time prove that it does pay to take better care of cattle.

During the winter of 1931-32 three farmers fed their calves for baby beef. The calves in question were sold in April, and brought from \$4.50 to \$5.50 per cwt. Comments on the returns were most gratifying. A practical experiment of this kind is bound to have a favourable effect on the local attitude towards cattle feeding. As a direct result of the above experiment, there are about 100 calves and yearlings on feed this winter. The matter of feed, feeding rations and shelter, in most cases, is under the direct supervision of this office.

A baby beef club was organized in November. It consisted of 12 members, feeding 35 calves. All members agreed that the proceeds from sales of the calves in question shall be used for the purchase of pure-bred Shorthorn heifers. It is pleasing to note that, so far, most of the calves on feed are doing exceedingly well.

A keen interest has been created for the improvement of the type and quality in cattle by the use of pure-bred sires. A total of 22 pure-bred bulls were distributed throughout the district; of these, 19 were Shorthorns and 3 Aberdeen Angus; 12 of these came under the Federal Bull Loaning Policy, 4 under the Provincial Bull Purchasing Policy, and 6 were bought for cash.

There were four new Shorthorn herds started with a total of nine cows. All were bred to sons of "Browndale Consul," a bull owned recently by the University of Alberta. It is hoped that these herds will eventually play an important role in the improvement of cattle in this district.

Early spring-farrowed pigs suffered a severe loss. Apparently this was due to iodine deficiency, as those breeders who fed potassium iodide to their brood sows as a preventive for hairless pigs, reduced their losses to a minimum. Production of pigs is decidedly on a downward trend, and by next spring it is expected to be 40 per cent. below that of a year ago. The use of Yorkshire boars has greatly increased the quality in the general run of commercial hogs.

Three swine clubs were supervised from this office. Membership of each club was as follows: Myrnam 24, Slawa 17, and Derwent 16 members; the last two mentioned were new clubs organized last spring. A careful record was kept of all swine club hogs marketed; it was found that 32.2 per cent. graded select bacon and 47.3 per cent. bacon, or a total of 80.5 per cent. above the butcher grade. Only one swine club team was sent to Edmonton to take part in the Interprovincial Judging Contest. This team stood fifth in a fairly strong competition.

The Dominion Live Stock Branch again has co-operated with the swine clubs by placing for their use 13 Yorkshire boars. These, together with the boars brought into the district last year, undoubtedly will have a very desirable influence in the improvement of bacon hogs.

Two Percheron horse clubs were organized, one at Myrnam and one at Derwent. This appears to be the most economical way to improve the quality of farm horses. During last winter horse drovers brought into this district over 200 head of horses, but they were of poor type, and the majority too small for farm work. The few that were good sold for around \$100.00 per head; this goes to indicate that good horses are in demand and bring fair prices.

Sheep are slowly gaining in popularity. The majority of farmers prefer Oxfords because of their long and heavy fleece. Five new sheep flocks were established last fall. One Oxford Ram Club was organized. It consists of 13 XX shearlings and one XXX lamb ram. Dogs are proving to be a serious menace to the sheep industry. A few of the flocks had been attacked and serious

damage done. It is feared that drastic steps will be necessary in order to prevent similar losses in the future.

Abnormally low prices for poultry produce had a very demoralizing effect on the poultry industry in this district. Consequently, only about 200 baby chicks and 100 setting eggs were shipped in last spring. Turkeys are quite popular on the majority of farms. A few Bronze turkey gobblers were brought in to introduce new blood into local flocks. To supply domestic needs, small flocks of ducks and geese are kept on practically every farm.

Assistance was rendered in the preparation and supervision of Myrnam School Fair. The fair was a complete success, and it is hoped that the good work will be continued. It was necessary to assist in judging at the school fairs held at Marwayne, Irma, Ryley and Andrew.

Short courses in agriculture were held at Elk Point, Derwent, Myrnam, Musidora and Angle Lake. Attendance was good in all but two points.

A number of public meetings were held during the year, at which problems pertaining to practical agriculture were discussed with the farmers.

GRANDE PRAIRIE DISTRICT

(W. J. THOMSON)

The Peace River country harvested a smaller crop than usual during the year 1932, due to light rainfall during June and July. There was considerable reserve moisture in the soil from the heavy winter and late spring snowfall which carried the crops along until late in July, and made possible a fair crop of wheat and an average crop of oats being harvested. Small lakes and sloughs were filled with snow water in the spring, and proved helpful to the small stock growers.

Soil drifting has not become a problem in this district, although a few fields are moving slightly. Farmers have sensed the danger, and are making plans to prevent such an occurrence. Considerable damage has again resulted from wireworms and cutworms. Many fields were so badly damaged that re-seeding was necessary, and the stand was so thin on other fields that the weeds got ahead of the grain and resulted in weedy, unprofitable crops. The control of wireworms and also cutworms is a problem that must soon command more of the attention of the Dominion and Provincial Departments of Agriculture.

Although wheat is still the major crop, and will continue to be the major crop of this district for some years, more thought has been given the past year to raising cattle, hogs, sheep and poultry, also forage crops and their place in a farm programme and rotation. The newer settlers have specialized in gardening and, like the older settlers, are looking to the farm to produce the things that can be consumed at home.

This district is a considerable distance from a market, and the farmers are feeling the handicap of high freight charges deducted

from the price of the products they have to sell and added to the things which must be brought in. This has almost excluded the tractor from farm work. The farmer is finding it more profitable to produce cheap power from his cheap oats, and raise a few colts to replace worn-out horses.

More farmers are raising cattle and hogs in an endeavour to market at a profit the abundance of coarse grains and roughage that is always available in this district. During the year 10,000 more hogs were shipped than during the previous year. Farmers who never fed cattle before are fattening baby beeves and older cattle this winter. The sheep population has increased, and some lambs are being fed for market. This office has encouraged the fattening of more stock at home, and has given assistance wherever possible.

The production of hogs of bacon type has been encouraged. The 75 pure-bred gilts and a like number of boars of Yorkshire breeding that were brought in last year have made available a splendid lot of breeding stock for distribution throughout the district. Five more Yorkshire boars have been received from the Dominion Live Stock Branch for use of the pig club members.

A new swine club was organized at DeBolt. This club is 40 miles east of Grande Prairie, on the new Edmonton highway. It is sponsored by the DeBolt Agricultural Society. This was a means of distributing a lot of good pigs in a new district. Swine clubs were continued at Sexsmith and Grande Prairie, and a car-load of hogs was marketed. The price received was \$3.50 for bacons. These clubs were sponsored by the local boards of trade.

Two boys were sent from Grande Prairie to represent the swine clubs of this district. These boys won the Provincial competition, and represented the Province in the Dominion competition at Toronto.

Junior wheat, junior oat and alfalfa clubs were organized in the Grande Prairie district. There were 50 entries in these clubs. Exhibits from the wheat and oat club were sent to the Royal Show at Toronto. In the wheat class the Grande Prairie boys won first, second, third, fifth and eighth prizes. The oat club boys also won the first, second and fourth prizes. A junior member was also fifth in the open wheat class at Chicago. The junior oat club won the cup offered by the Alberta Seed Growers' Association for having the highest score on their standing crops of any club in the Province.

Junior wheat and oat club members during the year have won a Dominion oat championship at Toronto and a Provincial oat championship.

A calf club has been organized in the Grande Prairie district, and beef type calves are being fed. These calves should be ready for market about the 1st of June. A combined calf show and field day will be planned, where the boys' calves can be shown and farmers of the district given an opportunity to see finished baby beeves.

Nine school fairs were held in the district under the supervision of Mr. F. B. Dixon, and assistance was given by this office where possible. The fairs were well attended, and great interest was

shown in the live stock classes. There was a fine display of flowers and vegetables of high quality.

There has been considerable enquiry for bulls of dual purpose type during the year, and a number have been distributed through the Provincial Sire Purchase Policy and through the loan policy of the Dominion Live Stock Branch. There is a great need for better sires to improve all grades of live stock.

There have been several new flocks of sheep started during the year. Sheep are adaptable to conditions here, and are proving an asset is pasturing rough and brush land. Hampshire rams have been secured through the assistance of Mr. Freeborn, of the Dominion Live Stock Branch, and distributed through clubs at Fairview, Spirit River, Sexsmith and Grande Prairie.

Horses have been used almost to the exclusion of tractors during the year, and many colts are being raised. There is an enquiry for good draft stallions of the different breeds. There has been the tendency to increase all kinds of live stock, and more forage crop seed has been sown than ever before in the district. The most of the seed was secured through the Field Crops Branch and under the Dominion Forage Crop Seed Policy.

The district has a great asset in the Peace River Co-operative Seed Growers, Limited. The business of the association is done through the office of the District Agriculturist. They have sponsored the junior crop clubs. They assist growers in the sale of registered seed. They also sponsored the holding of a seed fair again this year, with classes for juniors as well as the seniors. The exhibits were judged by W. D. Albright, of Beaverlodge, and Dr. O. S. Aamodt, of the University of Alberta. In speaking of these exhibits, Dr. Aamodt said that the quality was outstanding.

A large acreage of field-inspected crops was grown by members of the Seed Growers' Association. Four seed cleaning outfits were operated during the past season, cleaning more than 100,000 bushels of seed.

The Peace River shipped 1,000,000 bushels of cleaned seed oats to the Saskatchewan Relief Commission last spring. This order was secured through the Field Crops Branch of the Alberta Department of Agriculture. Three-quarters of a million bushels were shipped from south of the Peace River, the organization of these shipments being done through this office, with the assistance of Dominion seed inspectors. This order was of great assistance to the people of the whole Peace River district, as it raised the price of all oats several cents per bushel, and resulted in leaving a lot of needed cash in the district.

The district again has the distinction of winning the wheat, oat and timothy championships at the Chicago International; the Provincial wheat championship and the Dominion oat championship at Toronto Royal Winter Fair, the latter being won by a junior. The district also had first at the Provincial show for 50 bushels of registered oats and third at Toronto. Many smaller prizes were won.

At the time of the seed fair the Grande Prairie Board of Trade banquetted the members of the Seed Growers' Association and the

junior and senior prize-winners who had brought honour to the district. The members of the swine judging team were also honoured at this time, and members of the junior clubs were presented with the prizes and cups won during the year. The presentations were made by prominent farmers of the district.

The Wembley Board of Trade honoured the prize-winners of their district at a banquet during the summer. Mr. H. A. Craig, Deputy Minister of Agriculture, and E. L. Gray, Field Crops Commissioner, spoke to the seed growers on this occasion.

A field day was held in August at the farms of Mr. Alex. Craig and P. U. Clubine. This was well attended, and considerable interest was shown in both grain and live stock. Mr. E. C. Stacey, of the Beaverlodge Experimental Station, spoke on the different types of grains and grasses. Prof. J. P. Sackville, of the University of Alberta, and Mr. S. G. Carlyle, Live Stock Commissioner, demonstrated type in beef cattle and bacon hogs.

This office has assisted the Field Crops Branch in judging field crop competitions and other work where possible. Assistance has also been given to the Relief Branch in making investigations and reports.

The work of the past year has been greatly encouraged by the showing made by the junior club members. There has been a great enquiry from farmers in an endeavour to reduce costs of production. There has been a decided swing from grain farming to that of diversification, with an effort to secure more live stock and adjust the rotation to include live stock and forage crops. There has been a determination on the part of the farmer to produce first, in as far as possible, the things required for his own table. There has been a determination to market more of the produce of the farm at home, and while there has been a cutting of cost in producing the major crops, there has not been a dependence on these for a livelihood.

SCHOOL OF AGRICULTURE, OLDS

(JAMES MURRAY, *Principal*)

The 1931-32 term of the Olds School of Agriculture was brought to a close on the evening of March 31st. On that occasion Mr. J. F. Andrew, Assistant Deputy Minister of Agriculture, presented the prizes, and Rev. H. A. McLeod, of Robertson Church, Edmonton, delivered an inspiring address to the students.

Diplomas in agriculture were presented to young men who had successfully completed the work prescribed, and a diploma in home economics was presented to each of the young women.

This session opened on October 17th for the third year students and on October 26th for the other classes. In spite of depressing conditions, the enrollment was fully up to that of a year ago. The

following were the numbers taking instruction in the various classes:

First Year Agriculture	35
Second Year Agriculture	25
Two-in-One Agriculture	9
First Year Home Economics	24
Second Year Home Economics	10
Two-in-One Home Economics	13
Third Year (boys 17, girls 3)	20
Total.....	136

All students were given the regular medical examination shortly after arrival. A considerable number of defective eyes, throats, tonsils and teeth were detected, and suggestions were made for their treatment.

About the middle of the term there was an outbreak of influenza, which affected about 75 per cent. of the students and staff. We found it necessary to get in several additional nurses to properly care for those who were ill, at one time there being 65 confined to bed. Fortunately there were no complications, and by the early part of December all were back to normal health.

The course of study in both departments of the school has not been changed for several years. In the agricultural course major emphasis is laid on field crops, live stock and farm mechanics, including carpentry and blacksmithing, but some attention is given to horticulture, botany, chemistry and physics. It is also found necessary to devote considerable time to English and mathematics, as many students enter the school with very little high school education, and others have been out of school for a number of years.

In the home economics course the same work in English and mathematics is given as is covered by the students in agriculture, but the subjects given the most time are cooking, sewing, home nursing and household administration. The course is eminently practical, and is framed to fit those who take it for the important occupation of home-making.

The course for third year students is open to those who have completed the courses in agriculture and home economics, and is planned to fit them for matriculation into those faculties of the University. The work taken covers part of grades nine, ten and eleven. This course opens in the middle of October, and ends about the middle of May.

During July we had four short courses, which took practically all the month. The first week we had about 60 representatives of the Women's Institute girls' clubs on their annual convention. While they arranged much of their own programme, we were asked to fit in a number of lectures and demonstrations. These were planned to give the girls—most of them prospective students—a clear conception of the nature and scope of the course in home economics.

The second and third weeks of July were occupied by school fair short courses, with approximately 100 teen age boys and girls in attendance each week. During the fourth week we had the annual gathering of farm women, 35 in number, drawn from the southern and central parts of the Province.

We get many visitors during the summer picnic season. In July we had the members of the cow testing associations from Red Deer, Didsbury, Carstairs and Olds. All members of this group were greatly interested in the work under way here with hay and pasture crops. The same applies to the members of the Avondale Shorthorn Club who, to the number of about 150, visited the school and farm early in August.

We had many more small picnics, most of them representing men's and women's rural organizations. While most picnic groups like to be left to enjoy themselves in their own ways, part of the time we endeavour in all cases to show them some of the points of interest around the school and the farm, and to outline to them the nature of the courses that the school offers to young men and young women.

On account of the reduction in the staff during the summer months, it was necessary to curtail the amount of club work with boys and girls. However, Mr. Phillips supervised the Olds Calf Club. This club has an active membership of about 60—one of the largest in Canada. At the show held in July over 90 animals were exhibited in the junior, yearling and two-year-old classes.

Two members of this club, John Thomson and Lyle Graham, represented Alberta in the dairy calf club competition at the Royal Winter Fair, Toronto, and, in strong competition, succeeded in winning fourth place.

The annual calf club supper was held in the O.S.A. dining room on December 17th. The prizes were presented, and addresses were delivered by Mr. H. A. Craig, Deputy Minister of Agriculture, and Mr. F. H. Reed, Superintendent of the Experimental Station, Lacombe. The members were greatly interested in some moving pictures of themselves, taken at the calf club show in July.

SCHOOL FAIRS.

People generally are beginning to realize that school fairs, which train and encourage the young people of public school age to prepare and exhibit things produced on the farm, are doing a real service to the community, educationally, and are developing a group of exhibitors who will be leaders in the big fairs in the near future.

Interest in these fairs is growing, and communities which find it impossible to carry on the adult agricultural fairs are turning to the school fair as a means of continuing this kind of work at a much reduced cost.

While there would appear to be a dropping off of the number of exhibits shown as compared with last year, the fact that a number of classes were cancelled on the prize list this year makes an actual gain in the number of exhibits per class.

Due to the closing of the Claresholm and Raymond Schools of Agriculture, the school fair work for these districts was conducted from Olds, under the supervision of W. S. Benn, formerly of Claresholm, the fair work for the Olds district proper being under the supervision of G. R. Holeton.

In the spring of 1932, 41 fairs were reorganized in the Olds district, and of this number 39 held fairs. The two fairs cancelled were those at Cereal and Huxley.

A total of 38,421 exhibits were shown at the 39 fairs, these fairs including 412 schools and 10,261 pupils. The amount of prize money paid to exhibitors ranged from \$98.00 to \$412.50 for the various centres. Financial statements show balances ranging up to \$121.35, and no fair reported a deficit. Interest is keen, and the quality of exhibits is gradually improving.

During the spring months, after the seeds were distributed, all fair secretaries were visited by the Supervisor, as well as all the schools of the newly organized fairs, viz., New Brigden, Chinook and Wetaskiwin.

The outlook for the 1933 fairs is very good. Many inquiries are coming in, including requests for the forming of a few new centres. Reorganization meetings have been held, and most of the fairs are away to a good start.

In the Claresholm and Raymond districts 42 fairs were held. This represents a loss of two fairs from the previous year. The total value of awards dropped approximately 25 per cent. Total entries were less by 702, but this represents an actual percentage increase per pupil, because of the participation of fewer pupils and schools, together with a reduction in the number of classes open. Owing to the stress of financial conditions, a number of school boards declined to enter school fair associations.

There is evidence of a general tendency to broaden the scope of school fair activities by the addition of new features. There is evidence, too, of a higher appreciation of the educational value of school fair competition, and a tendency to make it an expression of the educational programme of the various communities. It is to be noted that the exhibitions are attaining a higher standard of quality each season.

SCHOOL FAIR SHORT COURSES.

Two short courses were held at Olds in 1932, the first during the week of July 11 to 16th, taking in the scholarship winners from the Raymond and Claresholm districts, and the second during the week of July 18th to 23rd, for the winners from the Olds district fairs.

The first group included 45 girls and 44 boys, and the second 42 girls and 42 boys; a boy and a girl from each fair held.

Transportation arrangements were carefully made, and movement to and from Olds was accomplished without a hitch. The daily programmes included regular classes in a variety of agricultural and domestic science subjects with game and rest periods interspersed. Each evening pleasing entertainment of a varied nature was provided. Each and every one attending these courses voted that the week spent at Olds was the most beneficial and enjoyable of their lives.

Those winning scholarships to the School of Agriculture were:

Margaret Fraser, Naco, and Russell Craig, Delburne, for the Olds district.

Mildred Queckboerner, Etzikom, and Myron Verburg, Manyberries, for the Raymond district.

Hazel Lyckman, Carmangay, and Normal Earl, Arrowwood, for the Claresholm district.

The short courses have proven extremely popular with both pupils and parents through the school fairs, and competition is very keen in all fair centres.

The short course provides the best means of acquainting a large number of young people from widely scattered districts with the facilities and opportunities offered at the Schools of Agriculture.

FIELD HUSBANDRY.

It has been found necessary to curtail somewhat the work in field husbandry, but we still maintain several important lines of work. The annual shrinkage in acreage of native pasture has, during recent years, stimulated the laying down of pastures with cultivated grasses and clovers. As comparatively little data are available on the species and varieties best suited for pastures, nor on the rates to use or the best combinations, we are doing considerable work along these lines. A number of plots of from one-quarter to one-third of an acre have been seeded to various grasses, clovers and mixtures with the intention of grazing them. We hope in this way to get information on their carrying capacity, their palatability and their response to trampling—all of them important factors in laying down pastures.

Replacing some of the cultural work with cereals, we have enlarged the area devoted to hay crops and mixtures. Alfalfa continues to be one of the most satisfactory crops for hay. It is hardy, of excellent quality, and more productive than any other hay crop available. One field of 26 acres yielded 114 tons in two cuttings in 1932.

We have reduced the number of varieties in the cereal crops to a low minimum. This year we grew for the first time Reliance wheat, a bearded variety strongly recommended by the University of Saskatchewan. It is a heavy yielder, but being rather later than Marquis, requires too long a season for this part of the Province. It has a long, rather weak straw, but might be adapted to some of the drier parts of Alberta.

The only variety of oats added was New Era. This has been widely advertised as a heavy producer, but here it did not yield as well as the standard varieties that were grown under the same conditions. It not only produced fewer bushels per acre than Victory or Banner, but the grain was lighter in weight and heavier in the hull. Moreover, the straw was very coarse and of little value for feed.

In seeding part of the lawn, a series of about 25 plots was put down to test out a number of varieties and mixtures of grasses for lawns, bowling greens, putting greens, etc. A few of these suffered badly from winter injury. The quality of the turf in the varieties that survived varied greatly showing the utter unsuitability of some varieties for the purpose of making a fine lawn.

Plots from the commercial lawn mixtures were planted for comparison. The most promising species in use are Kentucky Blue Grass, Chewing's Fescue and Red Top.

Marked progress has been made in fruit growing. It is only a few years ago since apples growing anywhere west of the Great Lakes were a novelty, but they have now become well established in Manitoba and eastern Saskatchewan. In Alberta we have had the benefit of their experience, and in our introductions have been able to get varieties already well adapted to growing in northern latitudes and high altitudes.

Among the varieties of apples and crab apples that have been planted here from time to time many varieties have proven unsuitable. The winters have gradually eliminated the tender sorts, and only the better ones remain. This year the following varieties of standard apples fruited: Ananoura, Charlamoff, Patten's Greening, Hiberna and Ostrakoff. We also had fruit from the following varieties of crab apples: Transcendent, Hyslop, Silvia, Rubin, Piatosh and Dolga.

In addition to the tree fruits, we harvested good crops of raspberries, black, red and white currants.

SCHOOL OF AGRICULTURE, VERMILION

(W. J. ELLIOTT, *Principal*)

The year 1932 saw another slight decline in the attendance of students at the Vermilion School of Agriculture. Last year there was a total of 100, while this year the attendance reached 98. Needless to say, the abnormally low prices of farm produce are alone responsible.

The students by classes and years since 1925 are as follows:

	1925	1926	1927	1928	1929	1930	1931	1932
First Year Girls	28	38	31	45	35	19	17	21
First Year Boys	40	55	61	72	60	46	30	35
Second Year Girls .....	.....	6	16	11	13	14	7	8
Second Year Boys .....	.....	24	24	32	31	22	28	19
Third Year Girls .....	.....	.....	.....	6	2	1	.....	.....
Third Year Boys .....	.....	.....	.....	5	13	8	.....	.....
British Boys	23	7	18	35	13	.....	.....	.....
Girls taking 2 in 1 .....	.....	.....	.....	1	.....	6	12	12
Boys taking 2 in 1 .....	.....	.....	.....	4	10	4	6	3
	<u>91</u>	<u>130</u>	<u>149</u>	<u>211</u>	<u>177</u>	<u>120</u>	<u>100</u>	<u>98</u>

One of those recorded as a second year boy for 1928 was Miss Alma Gudlaugson, of Clairmont. Again this year we have Mrs. Gunn, of Lloydminster, who is taking the two-in-one boy's course. The decline during 1932 is among the boys, as we have three more girls than in 1931, with the same number of two-in-one girls.

HEALTH OF STUDENTS.

Generally speaking, the health of the students has been good, though in common with many other districts we had a siege of "flu." The first case occurred on December 8th, and by December 22nd over 40 students had been confined to bed for from two to four days with mild attacks.

The physical examination of the students revealed the following ailments for 1931 and 1932:

	1931	1932		1931	1932
Not Vaccinated	31	26	Defective Posture	21	1
Arches	3	10	Lateral Curvature	3	....
Chest	9	3	Heart:		
Ears	14	5	Mitral Murmur	6	2
Teeth	33	10	Extra Systole	1	....
Gums	3	2	Pulmonary Murmur	1	1
Thyroids	9	2	Tonsils	35	12
Hernia	1	....	Joints	3	2
Other defects	9	....	Eyes	36	21
Glands .....	....	18	Skin	10	8

A considerable variation will be noted between the two years, but noticeably heavy during both years, were diseases of tonsils and eyes.

SCHOOL FARM.

The year 1932 was an excellent year for both grain and fodder crops on the school farm, and we have ample feed for our increasing live stock requirements.

AGRONOMY.

The work in agronomy for this year was greatly curtailed, resulting in the number of projects conducted on the experimental area being cut from 27 to 14. The projects retained and continued are those of greatest immediate concern to the district and farming conditions. An outline of the year's work is as follows:

Varietal Work.—This covered cereals, flax, forages and potatoes.

Rotations.—This was confined to the root rot area.

Fruit Growing.—This area was not extended materially, but was maintained in proper manner; some extension was made multiplying some of the fruits in the area.

Co-operative Work.—This was maintained, and consisted of root rot rotations, and rows of grain under observation for rust and smut by the pathologists at the University of Alberta.

Miscellaneous.—Growing of vegetables for the dormitory; supervising local junior grain clubs; doing field inspections for the Field Crops Branch, Department of Agriculture, Edmonton; addressing juniors on the showing of grain.

It is, of course, regretted that economic conditions made it necessary to reduce the staff to one man, but under the circumstances excellent results have been obtained that will insure a continuity of the work of this institution along experimental lines. It is hoped that this work may be continued next year, even if greatly curtailed, for, in spite of changing times, there is a large number of visitors at the school who expect to find various crops growing here. This would seem a justifiable reason for the continuation of the most essential work, while added to this is the worth-while data that it is possible to compile at the end of the season.

EXTENSION WORK.

Some 55 juniors received seed of cereals for small variety trial plots on their own farms. This work was not inspected, nor was it possible to follow up this work, due to no monies being available for extension work in agronomy this year. Various reports sent in

by the junior co-operators indicate that considerable interest was aroused, and the projects quite enjoyed and appreciated.

FRUIT AREA.

This area has now commenced to demonstrate that fruit in quite appreciable quantities can be grown in this section of the country. The trees have attained an age now when they are better able to resist winter killing and give fruit. It would appear that the early years in the life of fruit trees are the most precarious. We have adopted the practice of pruning at the end of August in an effort to have all wood well matured by freeze up. Quite large quantities of fruit was gathered, most of which found its way to the dormitory. Specifically, plums and crab apples are as yet the most prolific fruits.

There is a new area in which numerous varieties of raspberries are now well started. This area should commence to produce next year, and should give some data on varieties that is needed in the locality.

A large propagation of currants, poplars, willow and caragana was made this year. The underlying motive is that of distributing to Alumni members in an effort to raise funds for the association.

LEGUME CULTURE.

Report of the distributions of nitro-culture for the year 1932: To Government agents and Olds School of Agriculture, 780 bottles; to seed growers and co-operative associations, 766 bottles; to individual farmers from Vermilion, 1,282 bottles.

The monies collected from the sale of these supplies were deposited with the Provincial Treasurer. The amount to date is \$894.55.

LIVE STOCK.

The Manville Swine Club was discontinued as a separate unit, but the majority of the members united with Vermilion, making in all 34 members, 26 of whom contributed pigs for the car-load shipment. Those not sending were unable to do so because their hogs, if kept, would have been overweight, or because the hogs were not up to shipping weight.

Their load of hogs graded 41.2% select, 50.8% bacon, and 8% butcher. This compared with the provincial average of slightly over 8% selects and 30% bacon, is a very creditable showing.

During the first week of August a special two-day course for the swine club members was held. At this time members engaged in a judging contest, and the ten prize-winners were chosen.

During the spring we organized the local farmers interested in horse-breeding. A club was formed, and the services of the Provincial Department's stallion from Oliver was secured for the ten-week period following June 1st. In all, 60 mares were bred, and present indications are that a high percentage of these mares are with foal. We are hoping to have the services of the same horse again next season.

In sheep work we placed four Dominion loan rams and organized a new ram club with thirteen members. Two of these were supplied with shearlings, the other 11 with ram lambs.

APICULTURE.

During the last ten days in June a member of our staff attended a series of meetings over central and southern Alberta in connection with apiculture. These meetings were of a practical nature, and designed to help the large number of farmers and others starting in this new branch of farm work.

In our local bee-yard we are continuing to record nectar flow and to experiment in connection with wintering bees. This winter we have added a straw house to our equipment, and four colonies are being carried through the winter in this way.

SCHOOL FAIRS.

In spite of adverse financial conditions, the school fair programme for 1932 was maintained with but little decrease in the number of children taking part. The interest appeared to be intensely keen and the quality of exhibits, generally, was higher than for several years past.

All school boards taking part in school fairs were approached by letter, just previous to their annual meeting, and the response was most gratifying. A total of 39 fairs engaged in the work during September, one fair, that of Hairy Hill, being cancelled, owing to the inclemency of the weather.

During the year 1932, 384 schools engaged in the fairs under the supervision of the Vermilion School of Agriculture; pupils numbered 10,077, and they brought 43,279 exhibits for the inspection of the judges. The number of exhibits was slightly lower than that of 1931, owing to the fact that certain classes were excluded, at the discretion of the Director and the various supervisors.

SCHOOL STAFF, 1932.

W. J. Elliott, B.S.A., Principal and Instructor in Economics, Farm Management, Civics and Dairying; D. A. Andrew, B.S.A., Instructor in Animal Husbandry and Farm Manager; S. C. Heckbert, Instructor in Mechanics and in charge of School Fairs; B. J. Whitbread, B.S.A., Instructor in Agronomy and in charge of Experimental Plots; J. E. Edgar, B.Sc., Instructor in Science and in charge of Legume Culture production; W. G. Malaher, B.S.A., Instructor in English and Mathematics and assisting with School Fairs; Miss J. Goodall, relieving Miss M. E. Storey, on sick leave, as Matron and Instructress in Household Administration; Miss M. P. Shaw, Instructress in Sewing, Clothing and Design and Laundry; Miss L. M. I. Milne, B.Sc., Instructress in Cooking, Foods and Dietetics; Miss F. M. Smith, R.N., Instructress in Home Nursing and in charge of dormitory health; Edsel Jones, Instructor in Blacksmithing and Physical Training.

COMPARATIVE STATEMENT OF AGRICULTURAL PRODUCTION, 1931-32.

(Subject to revision when final check on census figures is completed)

Acreage	Yield per Acre—Bus.	Total Yield Bus.	Price	Value	Acreage	Yield per Acre—Bus.	Total Yield Bus.	Price	Value
1931									
GRAIN CROPS, Etc.									
7,999,895	17.0	136,000,000	\$ 0.36	\$48,960,000	All Wheat	20.0	164,000,000	\$ 0.27	\$44,280,000
2,447,288	37.0	90,500,000	0.18	16,290,000	Oats	37.5	101,500,000	0.11	11,165,000
728,772	28.7	20,800,000	0.21	4,368,000	Barley	28.1	19,700,000	0.12	2,364,000
152,019	7.2	1,100,000	0.22	242,000	Rye	10.9	1,988,000	0.13	258,000
17,909	33.2	595,000	0.19	113,000	Mixed Grains	28.9	731,000	0.14	102,000
28,831	6.9	200,000	0.72	144,000	Flax Seed	9.7	147,000	0.49	72,000
28,400	15.0	6,000	1.50	9,000	Peas	16.0	6,000	0.60	3,600
500	11.0	5,500	1.20	6,600	Beans	11.8	6,000	0.70	4,200
2,250	2.77	6,250	12.00	75,000	Alfalfa Seed	2.08	1,250	12.00	15,000
11,372,864		249,212,750		\$70,207,600	Total Grain Crops, etc.		288,079,250		\$58,263,800
ROOT CROPS									
35,596	78.0	2,776,000	\$ 0.42	\$ 1,166,000	Potatoes	68.0	2,102,000	\$ 0.64	\$ 1,345,000
1,700	126.0	214,000	0.30	64,000	Turnips, Mangolds, etc.	115.0	207,000	0.64	132,000
11,950	8.78	105,000	6.50	683,000	Sugar Beets	Tons	150,731	6.20	934,532
49,246				\$ 1,913,000	Total Root Crops	10.8			\$ 2,411,532
FODDER CROPS									
1,750,000	2.00	3,500,000	\$ 6.00	\$21,000,000	Green Feed	Tons	3,238,000	\$ 6.00	\$19,428,000
287,721	1.37	394,000	7.50	2,955,000	Hay and Clover	1.75	356,000	6.50	2,314,000
56,650	2.19	124,000	10.00	1,240,000	Alfalfa	2.45	139,000	8.00	1,112,000
3,600	3.55	13,000	4.00	52,000	Fodder Corn	5.81	26,000	3.50	91,000
2,097,971		4,031,000		\$25,247,000	Total Fodder Crops		3,759,000		\$22,945,000

DEPARTMENT OF AGRICULTURE

Number of Creameries or Factories	Total Production Lbs.	Cents	Value	DAIRY PRODUCTSS	Number of Creameries or Factories	Total Production Lbs.	Cents	Value
93	22,957,922	20.52	\$ 4,711,232	Creamery Butter	95	21,016,048	16.71	\$ 3,512,685
10	1,040,538	11.38	118,390	Cheese	12	1,439,715	10.15	146,177
			10,920,378	Other Dairy Products				8,191,138
			\$15,750,000	Total Dairy Products				\$11,850,000

Production Lbs.	Price Cents	MISCELLANEOUS PRODUCTS	Production Lbs.	Price Cents
915,000	10	Honey	550,000	8
3,500,000	4 1/2	Wool	3,200,000	4 1/2
		Poultry Products		
		Game and Furs		
		Animals Slaughtered and Sold		
		Total Miscellaneous Products		
		\$33,272,600		\$ 44,000
				144,000
				4,000,000
				877,332
				17,600,000
				\$22,665,332

SUMMARY OF AGRICULTURAL PRODUCTION,

1931	1932	1931	1932
Acres	Acres	Value of Production	
13,520,081	14,021,529	\$ 97,367,600	Grain, Root and Fodder Crops
3,500,000	4,003,800	15,750,000	Dairy Products
400,000	255,600	33,272,600	Miscellaneous Products
		\$146,390,200	Total
17,420,081	18,280,929		\$ 83,620,332
			11,650,000
			22,665,332
			\$117,935,664